

Department Order Appealed

Denial of Application # L-25597-24-A-N / L-25597-TH-B-N



STATE OF MAINE
Department of Environmental Protection

PAUL R. LEPAGE
GOVERNOR

PATRICIA W. AHO
COMMISSIONER

November 2012

Passadumkeag Wind Park, LLC
5 Houston Center
1401 McKinney Street, Ste. 1800
Houston, TX 77010
ATTN: Mike Beckner

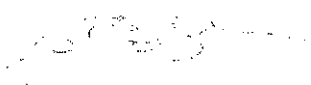
RE: Site Location of Development Act Application,
Greenbush, Summit Mountain Twp., Grand Falls Twp., Greenfield Twp.,
#L-25597-24-A-N/L-25597-TH-B-N/Denial

Dear Mr. Beckner:

Please find enclosed a signed copy of the denial of your Department of Environmental Protection applications for permits under the Site Location of Development Act and the Natural Resources Protection Act. You will note that the denial includes a description of your project, and findings of fact that relate to the criteria the Department used in evaluating your project. The Department reviews every application thoroughly and strives to formulate reasonable findings of fact within the context of the Department's environmental laws. You will also find attached some materials that describe the Department's appeal procedures for your information.

If you have questions or concerns, I can be reached at (207) 446-9026 or at jim.r.beyer@maine.gov.

Sincerely,


Jim R. Beyer, Project Manager
Division of Land Resource Regulation
Bureau of Land & Water Quality

pc: File

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STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
17 STATE HOUSE STATION
AUGUSTA, ME 04333

DEPARTMENT ORDER

IN THE MATTER OF

PASSADUMKEAG WIND PARK, LLC) SITE LOCATION OF DEVELOPMENT ACT
Greenbush, Grand Falls Township,) NATURAL RESOURCES PROTECTION ACT
Summit Mountain Township, Greenfield) WATER QUALITY CERTIFICATION
Township)
Penobscot County)
PASSADUMKEAG WIND PARK)
L-25597-24-A-N (denial))
L-25597-TH-B-N (denial)) FINDINGS OF FACT AND ORDER

Pursuant to the provisions of 35-A M.R.S.A. Sections 3401-3457, 38 M.R.S.A. Sections 481 *et seq.* and 480-A *et seq.*, and Section 401 of the Federal Water Pollution Control Act, the Department of Environmental Protection (Department) has considered the application of PASSADUMKEAG WIND PARK, LLC with the supportive data, agency review comments, and other related materials on file and FINDS THE FOLLOWING FACTS:

1. PROJECT DESCRIPTION:

A. Summary: The applicant proposes to construct a wind turbine project consisting of 14 turbines. This project qualifies as an expedited wind energy development as defined in the Wind Energy Act (38 M.R.S.A. §3451(4)). The area of land proposed to be used for the turbine portion of the project is located wholly within property currently used for commercial forestry operations. The site contains logging roads that would be upgraded and used for project access to minimize clearing and wetlands impacts. In addition to the turbine farm, the project would include an operations and maintenance (O&M) building as well as associated facilities. The O&M building would be located in the town of Greenbush, an organized town. The proposed project overall includes 21.47 acres of impervious area and 97.38 acres of developed area. The development of the O&M building would result in approximately 3.54 acres of impervious area.

1) Wind Turbines. The applicant proposes to construct 14 Vestas V112, 3.0 megawatt (MW) turbines for a total of 42 MW of generation capacity. Each turbine would be 84 meters (approximately 276 feet tall) to the center of the hub and a total of 140 meters (approximately 459 feet) to the tip of a fully extended blade. The turbines would be located on top of Passadumkeag Mountain in Grand Falls Township.

- 2) Turbine Pads. The turbines would be constructed on 14 pads, each approximately 1.3 acres in size, for a total impervious area associated with the turbine pads of 17.93 acres.
- 3) Access Roads and Crane Path. The applicant proposes to upgrade existing logging roads for access and the crane path.
- 4) Electrical Collector Substation and O&M Building. The applicant proposes to construct an electrical substation and an O&M building in the town of Greenbush. The total new impervious area from these two structures is 3.54 acres and the total new developed area would be 3.69 acres. The proposed substation and O&M building would be adjacent to Bangor Hydro Electric Company's (BHE) transmission line, Line 64.
- 5) Meteorological Towers. The applicant is proposing to construct one meteorological tower on the site to monitor turbine performance.
- 6) Generator Lead Line. The applicant is proposing to collect power from the turbines in a 34.5 kilovolt (kV) generator lead line. The generator lead line would run approximately 17 miles from the ridge along the Greenfield Road through Summit Township, Greenfield Township and Greenbush. Nearly all of this line would be adjacent to an existing distribution line right-of-way (ROW) and an existing road. The existing distribution line ROW runs from the existing communications tower on Passadumkeag Mountain to Greenbush along the Greenfield Road. The distribution line ROW would be widened and the existing poles replaced.

The applicant's proposal includes the conversion of 1.22 acres of forested wetland to scrub-shrub wetland associated with the widening of the collector line ROW, and the alteration of 9,800 square feet of moderate value inland waterfowl and wading bird habitat (IWWH) in two locations adjacent to the Greenfield Road.

The project is shown on a series of plans included with the application, the first of which is entitled "Predevelopment Drainage Plan", prepared by the James W. Sewall Company, and dated January 30, 2012.

On October 30, 2012, the applicant submitted a proposal to remove one turbine from the project. In order to allow the Department to meet its statutory time frame for processing the application, this information was not reviewed or considered in the preparation of this Order.

- B. Public Interest: The department received multiple requests for the Board of Environmental Protection (Board) to assume jurisdiction over these applications and hold a public hearing. However, the Board's authorizing statute, 38 M.R.S.A. §341-D(2), does not allow the Board to assume jurisdiction over applications for approval of expedited wind energy developments as defined in the Wind Energy Act (38 M.R.S.A. §3451(4)). As set forth in the Department's Rules, Chapter

2(7)(B), the holding of a public hearing on applications is discretionary. In this case the Commissioner determined that there was not sufficient credible conflicting technical information submitted and a public hearing was not warranted in order to assist her in understanding the evidence. Therefore, a public hearing was not held. The Department held the first of two public meetings on April 25, 2012 at the Greenbush town office. The Department sent letters to all abutters of the project notifying them of the meeting, notified the respective town offices, and published notice in a local newspaper. The Department received many emails and letters from interested persons expressing concerns about the proposed project. Those letters and emails describing issues related to standards that are reviewed under the Site Location of Development Act (Site Law) or under the Natural Resources Protection Act (NRPA) were considered in the review of the proposal. On July 12, 2012, the Department held the second public meeting at the Helen S. Dunn School in Greenbush. The second public meeting was attended by the Commissioner.

Several interested persons contend that the 20,000 acres included in a conservation easement between Robbins Lumber, Inc. and the State of Maine should be considered a Scenic Resource of State or National Significance (SRSNS) pursuant to the Wind Energy Act. As discussed below in Finding 6, the Department ultimately determined that the conservation easement was not a SRSNS.

Interested persons contend that a series of statements by the applicant concerning greenhouse gas emissions and global warming in Section 28 of the Site Law application (Tangible Benefits) were not supported by scientific facts. The application includes a statement that renewable energy demands are increasing and that this project would address concerns about reducing greenhouse gases and particulates from combustion. The Legislature made findings in its adoption of the Wind Energy Act, in 35-A M.R.S.A. §3402, that it is in the public interest to encourage the construction and operation of community wind power generation facilities because wind energy "is an economically feasible, large-scale energy resource that does not rely on fossil fuel combustion or nuclear fission, thereby displacing electrical energy provided by these other sources and avoiding air pollution, waste disposal problems and hazards to human health from emissions, waste and by-products". Further 35-A M.R.S.A. §3454 directs the Department to presume that an expedited wind energy development provides energy and emissions-related benefits. The Department defers to the Legislature's findings and also utilizes its knowledge and expertise in this area to evaluate the statements. The policy considerations of the Legislature in enacting the Wind Energy Act are relevant in the Department's interpretation of its statutes, but the Department is required to focus on the statutory licensing criteria set forth by the Legislature. The amount of potential climate benefit from the proposed project is not a factor under the licensing criteria.

While the application was being reviewed, the Department received comments from some interested persons in the surrounding towns expressing concerns that the proposed project would negatively impact tourism. Other interested persons commented that the threat of a forest fire was extreme and the cost of fire suppression should be borne by the applicant. The Department also received some

comments about the shortcomings of the Wind Energy Act. These concerns are noted but are only considered to the extent they address permitting criteria and are thus within the scope of the Department's review of the proposed project.

- C. Current Use of Site: The site of the proposed project is undeveloped woodlands and is currently used extensively for commercial forestry operations. Development on the property consists of one communications tower, a second communications tower which is under construction, and two leased camps.

2. TITLE RIGHT OR INTEREST:

To demonstrate title, right or interest in the property proposed for development, as required in Chapter 2(11)(D) and Chapter 372(9) of the Department's rules, the applicant submitted copies of deeds, leases and lease options between the applicant and the property owners for the proposed project site. The submissions include deeds which show that the property owners who are leasing to the applicants have ownership over the parcels which are the subject of the leases. The duration and the terms of the leases for the proposed project area are sufficient for the duration of the proposed project. The applicant also submitted easements for certain adjacent parcels of land pertaining to noise, shadow flicker effects and safety setbacks.

The Department finds the applicant has demonstrated sufficient title, right or interest for the area which would be occupied by the project.

3. FINANCIAL CAPACITY:

The applicant estimates the total cost of the project to be \$79 million.

Passadumkeag Wind Park, LLC is a legal entity authorized to do business in the State of Maine and is a wholly owned subsidiary of Quantum Utility Generation, LLC (Quantum). Passadumkeag Wind Park, LLC was established to develop and own the Passadumkeag wind project. The application states that Quantum intends to provide all of the funding for the project. The application also states that Quantum may elect to find third party financing.

The applicant submitted a letter dated February 1, 2012 from Quantum indicating that it intends to finance the project. In addition the applicant submitted a letter from Price Waterhouse Coopers LLP, dated April 27, 2011, which contains a report of independent auditors indicating total assets of more than \$355 million.

The Department finds the applicant has adequate capacity to fund the project, provided that prior to construction the applicant shall submit evidence that it has been granted a line of credit or a loan by a financial institution authorized to do business in this State, or evidence of any other form of financial assurance determined by Department Rules, Chapter 373(1), to be adequate to the Bureau of Land and Water Quality (BLWQ) for review and approval.

4. TECHNICAL ABILITY:

The applicant operates several other energy projects with a total generation capacity of 866 MW in Virginia and Mississippi and is in the process of developing solar and wind project across the country. In addition the applicant retained the services of the following companies to prepare the application:

- Stantec Consulting – natural resource assessment, permitting
- James W. Sewall Company– engineering and stormwater
- Albert Frick Associates, Inc. – soil assessment
- Terrence DeWan Associates – visual impact analysis
- Public Archeology Lab – historic archaeological resources
- TRC/Northeast Cultural Resources – prehistoric archaeological resources
- Independent Archaeological Consulting – historic archaeological resources

Based on the experience and expertise of the applicant and their retained consultants, the Department finds that the applicant has demonstrated adequate technical ability to comply with Department standards.

5. NOISE:

To address the Site Law standard pertaining to the control of noise, 38 M.R.S.A. §484(3), and the applicable rules, Chapter 375(10), the applicant submitted a Noise Impact Study entitled “Sound Level Assessment for the Passadumkeag Wind Park Project,” completed by Stantec Consulting, Ltd and dated January 2012 and April 2012. The sound level study was conducted to model expected sound levels from the proposed project, and to compare the model results to the applicable requirements of Chapter 375(10).

The Passadumkeag Wind Park project must comply with Department regulations applicable to sound levels from construction activities, routine operation and routine maintenance. Chapter 375(10) applies hourly sound level limits (L_{eqA-Hr}) at facility property boundaries and at nearby protected locations. Chapter 375(10)(G)(16) defines a protected location as “[a]ny location accessible by foot, on a parcel of land containing a residence or planned residence or approved subdivision near the development site at the time a Site Location of Development application is submitted...”. In addition to residential parcels, protected locations include, but are not limited to, schools, state parks, and designated wilderness areas.

The hourly sound level resulting from routine operation of a development is limited to 75 decibels (dBA) at any development property boundary as outlined in Chapter 375(10)(C)(1)(a)(i). The hourly equivalent sound level limits at any protected location vary depending on local zoning or surrounding land uses and existing (pre-development) ambient sound levels. At protected locations within commercially or industrially zoned areas, or where the predominant surrounding land use is non-residential, the hourly sound limits for routine operation are 70 dBA in the daytime (7:00a.m. to 7:00 p.m.) and 60 dBA in the nighttime (7:00 p.m. to 7:00 a.m.). At protected locations within residentially zoned areas or where the predominant

surrounding land use is residential, the hourly sound level limits for routine operation are 60 dBA daytime and 50 dBA for nighttime. Where the daytime pre-development ambient hourly sound level is equal to or less than 45 dBA and/or nighttime ambient hourly sound level is equal to or less than 35 dBA, the Department's strictest "Quiet Location" limits of 55 dBA daytime and 45 dBA nighttime apply.

Due to the rural nature of the area for which the project is proposed, Department standards require that the applicant meet the "Quiet Location" limits, the Department's most restrictive sound limits. The applicant proposes to operate the project in compliance with these limits as set forth in Chapter 375(10)(H)(3)(1). In Quiet Locations, nighttime limits of 45 dBA at a protected location apply at the property line of the protected location, or up to 500 feet from sleeping quarters when the property line is greater than 500 feet from a dwelling. For this project there are three protected locations. Pursuant to Chapter 375(10)(5)(s) sounds from a regulated development received at a protected location are exempt from the regulations when the owner of the property conveys a noise easement for that location to the generator of the sound. The owner of one protected location has license agreement with the underlying landowner making the licensee subject to sound emissions from the wind project.

To assist with the review of the application, the Department retained an independent noise expert, Peter Guldberg of Tech Environmental, Inc., to review the applicant's prediction model and associated data as well as other evidence received on the issue of noise.

A. Sound Level Modeling. The applicant's noise consultant, Stantec Consulting, Ltd., developed a sound level prediction model to estimate sound levels from the operation of the proposed project. The sound model for the project was created using Cadna/A software developed by DataKustik of Germany. Cadna/A allows the consultant to construct topographic surface models of area terrain for calculating sound attenuation from multiple sound sources such as wind turbines. The locations of the proposed turbines, roads, parcels, land uses and waterbodies were entered into Cadna/A in order to calculate sound levels at various points within the proposed project area. Sound level predictions were calculated in accordance with ISO 9613-2, which is an international standard for calculating outdoor sound propagation.

This computerized model is capable of predicting sound levels at specific receiver positions originating from a variety of sound sources. Applicable national or international standards can also be included in the analysis as described above. Cadna/A accounts for such factors as:

- Distance attenuation;
- Geometrical characteristics of sources and receivers;
- Atmospheric attenuation (i.e. the rate of sound absorption by atmospheric gases in the air between sound sources and receptors);

- Ground attenuation (effect of sound absorption by the ground as sound passes over various terrain and vegetation types between source and receptor);
- Screening effects of surrounding terrain; and
- Meteorological conditions and effects.

The applicant states that conservative modeling assumptions were applied when analyzing the sound impacts of the project to allow for uncertainties in the sound power output from the turbines and inherent uncertainties in mathematical modeling of the sound propagation. To be conservative, a factor of three dBA was added by the applicant's consultant to the manufacturer's sound power level of the turbines, and a factor of two dBA was added to account for uncertainty in the mathematical modeling, resulting in a total adjustment factor of five dBA.

Sound associated with the operational phase of the project was modeled excluding other existing sound sources. Modeling the sound generated from the operation of the 14 turbines was conducted by first obtaining the manufacturer's sound power level specifications (106.5 dBA), and then applying the uncertainty factors described above to account for the manufacturer's uncertainty and the modeling uncertainty, for a total sound power level of 111.5 dBA from each turbine. The model was run with all 14 turbines operating at full sound power output. No noise reduction operations are proposed for this project.

Although substation transformers emit sound, they were not considered significant sound sources by the applicant's consultant due to the low sound output and relatively large distance from protected locations, and were therefore not included in the model. The Department and Peter Guldberg found this appropriate and acceptable.

- B. Short Duration Repetitive Sound. Chapter 375(10)(G)(19) defines short duration repetitive sound (SDRS) as "a sequence of repetitive sounds which occur more than once within an hour, each clearly discernible as an event and causing an increase in the sound level of at least 6 dBA on the fast meter response above the sound level observed immediately before and after the event, each typically less than ten seconds in duration, and which are inherent to the process or operation of the development and are foreseeable." Chapter 375 requires that if any defined SDRS results from routine operation of a development, 5 dBA must be added to the observed level of sound.

The January 2012 sound level study submitted by the applicant summarized measurements of operating wind turbines in Maine and data from published literature that indicate that sound level fluctuations during the blade passage of wind turbines typically range from 2 to 5 dBA, with an occasional event reaching 6 dBA or more. However, the applicant's report concludes that the occurrence of these higher fluctuations would be so infrequent that they are not expected to meet the Department's definition of SDRS or affect the predicted sound levels. The Department's expert, Tech Environmental reviewed this study and stated, "Since the 5-dBA penalty for SDRS is applied only to the SDR sounds and not the entire

measurement interval, the infrequent occurrence of SDR sound events are not expected to significantly affect the project's sound levels and no adjustment to the acoustic model predictions for 1-hour L_{eqA} levels is necessary." Based on the applicant's January 2012 sound level study and the assessment of the Department's noise expert, it appears the proposed project is unlikely to generate short duration repetitive sounds. Compliance testing for SDRS which would have been incorporated into the post-construction noise monitoring program (discussed in Section 5.F. below) after project completion would have provided assurance that SDRS was not occurring.

- C. Tonal Sound. As defined in Chapter 375(10)(G)(24), a regulated tonal sound occurs when the sound level in a one-third octave band exceeds the arithmetic average of the sound levels in the two adjacent one-third octave bands by a specified dBA amount based on octave center frequencies. Chapter 375 requires that 5 dBA be added to the observed level of any defined tonal sound that results from routine operation of a development.

The applicant's January 2012 sound level study states that the Vestas V112 turbines proposed for use carry Sound Level Performance Standard warranties certifying that they will not produce a tonal sound as it is defined by the Department's Noise Regulations. In his review of the applicant's sound level study on behalf of the Department, Mr. Guldberg confirmed that an analysis of the sound power octave band spectrum for the Vestas V112 turbine reveals that it has no potential for creating a tonal sound as defined in the Department's Regulations.

- D. Generator Lead Line. The proposed generator lead line is anticipated to produce a minor noise impact during operation.
- E. Department Analysis. Mr. Guldberg reviewed all of the materials submitted by the applicant and by members of the public. He reviewed the applicant's January 2012 and April 2012 Sound Level Assessments and submitted a report entitled "Peer Review of the Sound Level Assessment for the Passadumkeag Wind Project", dated April 13, 2012 and May 1, 2012. Mr. Guldberg concluded that the turbine maximum sound power level used in the analysis was conservative and tended to overestimate the actual turbine sound levels; the acoustic model and its assumptions are appropriate; the sound receiver locations are appropriate; the decibel contour maps adequately cover the potential impact area; and the Department's Noise Regulations have been properly interpreted and applied by the applicant.
- F. Post-construction Monitoring Program. The applicant did not propose to conduct post-construction noise monitoring due to the lack of receptors in the area, unless there was a complaint. However, Mr. Guldberg recommended the Department require limited post-construction monitoring at receptor R2 (the only protected location within one mile of any turbine) following the test methodology in the Saddleback Ridge Wind project Permit. The Saddleback Ridge Wind compliance monitoring program consisted of:

1. Post-construction operation compliance testing representative of two separate regions around the project completed within the first year of operation. However for the Passadumkeag Wind project, this can be reduced to a single location at receptor R2.
2. Compliance must be demonstrated based on the following outlined conditions for twelve 10-minute measurement intervals per monitoring location meeting as set forth in Chapter 375(10) requirements. All data submittals must be accompanied by concurrent time stamped audio recordings.
 - a. Compliance will be demonstrated when the required operating/test conditions have been met for twelve 10-minute measurement intervals at each monitoring location.
 - b. Measurements must be obtained during weather conditions when wind turbine sound is most clearly noticeable, when the measurement location is downwind of the development and maximum surface wind speeds ≤ 6 mph (wind speeds for this project must be ≤ 12 mph) with concurrent turbine hub-elevation wind speeds sufficient to generate the maximum continuous rated sound power from the five nearest wind turbines to the measurement location. Measurement intervals affected by increased biological activities, leaf rustling, traffic, high water flow or other extraneous ambient noise sources that affect the ability to demonstrate compliance may be excluded from reported data. A downwind location exists when the wind direction is within 45° of the direction between a specific measurement location and the acoustic center of the five nearest wind turbines.
 - c. Sensitive receiver sound monitoring locations must be positioned to most closely reflect the representative protected locations for purposes of demonstrating compliance with applicable sound level limits, subject to permission from the respective property owner(s). Selection of monitoring locations will require concurrence from the Department.
 - d. Meteorological measurements of wind speed and direction should be collected using anemometers at a 10-meter height above ground at the center of large unobstructed areas and generally correlated with sound level measurement locations. Results should be reported based on one-second integration intervals, and be reported synchronously with hub level and sound level measurements at 10 minute intervals. The wind speed average and maximum should be reported from surface stations. Department concurrence on meteorological site selection is required. One-second data should be available on request, as required.
 - e. Sound level parameters reported for each 10-minute measurement period should include A-weighted equivalent sound level, 10/90% exceedence levels and ten one-minute 1/3-octave band linear equivalent sound levels (dB). Short duration repetitive events should be characterized by event duration and amplitude. Amplitude is defined as the peak event amplitude

minus the average minimum sound levels immediately before and after the event, as measured at an interval of 50 millisecond (ms) or less, A-weighted and fast time response, i.e. 125 ms. For each 10-minute measurement period short duration repetitive sound events should be reported by the percentage of 50 ms or less intervals for each observed amplitude integer above 4 dBA. Reported measurement results should be confirmed to be free of extraneous noise in the respective measurement intervals to the extent possible and in accordance with section (b) above.

- f. Compliance data collected in accordance with the assessment methods outlined above for representative locations selected in accordance with this protocol must be gathered and submitted to the Department at the earliest possible opportunity after the commencement of project operation, with consideration for the required weather, operations, and seasonal constraints, but no later than twelve months after commencement of project operation. Subsequently, compliance data for each location must be submitted to the Department for review and approval once every successive fifth year until the project is fully decommissioned.
 - g. All operational, sound and meteorological data shall be retained by the applicant for a period of one year from the date of collection. All audio data collected shall be retained by the applicant for period of four weeks from the date of collection unless subject to a complaint filed in accordance with the sound complaint protocol outlined below, in which case the audio data shall be retained for a period of one year from the date of collection. All operational, sound, audio and meteorological data is subject to inspection by the Department and submission to the Department upon request.
- G. Sound Complaint Response and Resolution Protocol. The applicant did not propose a formal complaint response protocol due to the lack of receptors in the area. The application does state that if a complaint is received, the applicant will investigate it and if it is determined to that the project may have been the cause, an ambient monitoring program will be proposed. The applicant must notify the Department of any complaints within three business days of receiving them and must notify the Department of the outcome of its investigation within three business days of completion.

Based on the applicant's submissions and the review of those submissions by the Department's expert, the Department finds that the proposed project would meet all applicable standards of Chapter 375(10), including tonal sound and SDRS, and that the applicant has made adequate provisions for the control of excessive environmental noise from the proposed project. To ensure that the project operates in compliance with the permit and the Department's regulations, the Department finds that the applicant must implement the post-construction monitoring program described above, including the sound complaint protocol. The applicant must investigate all complaints and must notify the Department of any complaints within three business days of receiving them, and must notify the Department of the outcome of its investigation within three business days of completion; and the

applicant must submit sound level monitoring reports in accordance with the post-construction monitoring program described above. Upon any finding of non-compliance by the Department, the applicant must take short-term action immediately to adjust operations to reduce sound output to applicable limits under Chapter 375(10). Within 60 days of a determination of non-compliance by the Department, the applicant must submit, for review and approval, a mitigation plan that proposes actions to bring the project into compliance. The Department will review any such mitigation plan and may require additional mitigation or alternative measures. If immediate actions to bring the project into compliance with the applicable noise standards are not taken or not successful while the process of generating and obtaining approval of a longer term plan is taking place, the Department may take such enforcement action as it finds appropriate to ensure compliance with the Site Law, applicable provisions of Chapter 375(10), and this Order.

6. SCENIC CHARACTER:

The Site Law and the NRPA both have standards pertaining to scenic impacts that must be satisfied in order to obtain a permit. The Site Law requires an applicant to demonstrate that a proposed project would fit harmoniously into the natural environment and would not adversely affect existing uses or scenic character. Pursuant to the NRPA an applicant must demonstrate that a proposed project would not unreasonably interfere with existing scenic, aesthetic or recreational uses of a protected natural resource. The Wind Energy Act further specifies those standards and declares that when expedited wind energy developments are being evaluated:

[T]he [Department] shall determine, in the manner provided in subsection 3, whether the development significantly compromises views from a scenic resource of state or national significance such that the development has an unreasonable adverse effect on the scenic character or existing uses related to scenic character . . . Except as otherwise provided in subsection 2, determination that a wind energy development fits harmoniously into the existing natural environment in terms of potential effects on scenic character and existing uses related to scenic character is not required for approval under... Title 38, section 484, subsection 3. 35-A M.R.S.A. §3452(1).

With regard to the facilities associated with an expedited wind energy development, such as substations, buildings, access roads and generator lead lines, the Wind Energy Act, 35-A M.R.S.A. §3452(2), provides in pertinent part that:

The [Department] shall evaluate the effect of associated facilities of a wind energy development in terms of potential effects on scenic character and existing uses related to scenic character in accordance with ... Title 38, section 484, subsection 3, in the manner provided for development other than wind energy development if the [Department] determines that application of the standard in subsection 1 to the development may result in unreasonable adverse effects due to the scope, scale, location or other characteristics of the associated facilities. An interested party may submit information regarding this determination to the [Department] for its

consideration. The [Department] shall make a determination pursuant to this subsection within 30 days of its acceptance of the application as complete for processing.

The Wind Energy Act, 35-A M.R.S.A. §3452(3), further provides that:

A finding by the [Department] that the development's generating facilities are a highly visible feature in the landscape is not solely sufficient basis for determination that an expedited wind energy project has an unreasonable adverse effect on the scenic character and existing uses related to scenic character of a scenic resource of state or national significance. In making its determination under subsection 1, the [Department] shall consider insignificant the effects of portions of the development's generating facilities located more than 8 miles, measured horizontally, from a scenic resource of state or national significance.

The proposed wind project contains "generating facilities" including wind turbines and towers as defined by 35-A M.R.S.A. §3451(5) and "associated facilities" such as buildings, access roads, generator lead lines and substations, as defined by 35-A M.R.S.A. §3451(1). The proposed project is subject to the expedited wind energy development standards outlined above and, to the extent applicable, 38 M.R.S.A. §484(3). The project also contains a generator lead line which would replace an existing line almost in its entirety.

As provided in the Wind Energy Act, 35-A M.R.S.A. §3452(2), the Department made a determination within 30 days of the receipt of the application that the potential effects of the generator lead line on the scenic character and existing uses would be reviewed under the standards set forth in the Wind Energy Act (35-A M.R.S.A. §3452).

To address the scenic impact criteria, the applicant submitted a Visual Impact Assessment (VIA) entitled "Visual Impacts of a Generation Facility", prepared by Terrence J. DeWan and Associates (TJD&A). The VIA examined the potential scenic impact of the generating facility and associated facilities on Scenic Resources of State or National Significance (SRSNS) within eight miles of the proposed project using the evaluation criteria contained in the Wind Energy Act. The applicant also submitted a user intercept survey authored by Market Decisions and dated October 2011.

The applicant conducted a VIA within an eight-mile radius of the proposed generation facility portion of the project. The applicant's VIA for the generating facility and associated facilities addressed the criteria set forth in 35-A M.R.S.A. §3452(3):

- (A) The significance of the potentially affected scenic resource of state or national significance;
- (B) The existing character of the surrounding area;
- (C) The expectations of the typical viewer;
- (D) The expedited wind energy development's purpose and the context of the proposed activity;
- (E) The extent, nature, and duration of potentially affected public uses of the scenic resource of state or national significance and the potential effect of the

- generating facilities' presence on the public's continued use and enjoyment of the scenic resource of state or national significance; and
- (F) The scope and scale of the potential effect of views of the generating facilities on the scenic resource of state or national significance, including but not limited to issues related to the number and extent of turbines visible from the scenic resource of state or national significance, the distance from the scenic resource of state or national significance and the effect of prominent features of the development on the landscape.

A. SCENIC RESOURCES OF STATE OR NATIONAL SIGNIFICANCE

Scenic Resources of State or National Significance (SRSNS) are defined in 35-A M.R.S.A. §3451(9). The following is a description of what constitutes an SRSNS and the applicant's summary of potential impacts to SRSNS within eight miles of the proposed generating facilities:

- 1) National Natural Landmarks. National natural landmarks (NNL) are federally designated wilderness areas or other comparable outstanding natural and cultural features, such as the Orono Bog or Meddybemps Heath.

According to the National Park Service, there is one National Natural Landmark within eight miles of the Passadumkeag Wind Project: the 6,100-acre Passadumkeag Marsh and Boglands. The southeast tip of the area designated as a NNL touches the line that circumscribes area within eight miles of the generating facilities. The National Park Service's website describes the Passadumkeag Marsh and Boglands NNL as:

One of the largest, unspoiled wetlands in the state of Maine, Passadumkeag Marsh and Boglands contains a unique blend of bog and marsh communities. The marsh is partially bounded by eskers, including the classic Passadumkeag Esker, or Enfield Horseback, known world-wide as an example of glacial geology.

According to the Maine Department of Conservation's publication, *Conservation Lands in Maine*, the Passadumkeag Marsh and Boglands are part of the Cold Stream/Ayers Brook Preserve, which is a series of interconnected tracts of land held by The Nature Conservancy in fee. The area is open for public use, although access is limited due to the nature of the landscape. There are no developed trails and access by road is limited to small areas of frontage on Gould's Ridge Road and Enfield Road. Public use of the area is primarily in the form of canoeing and hunting waterfowl. The applicant states that, at most, the top of one turbine may be visible from the preserve and it would appear as a very small object on a relatively flat horizon. The applicant concludes that the presence of the turbines should not have any visual impact on the Passadumkeag Marsh and Boglands.

The applicant did not identify any other NNL, federally designated wilderness areas, or other comparable outstanding natural and cultural features.

In response to questions raised by an interested person, the Department considered whether potential scenic impacts involving the portion of the Robbins Lumber Easement that is located within eight miles of the generating facilities should be evaluated as a SRSNS. The Department concluded that the features within the Robbins Lumber Easement are not comparable to NNL or federally designated wilderness areas, and the Department did not require the applicant to submit information on potential impacts there.

- 2) Historic Resources. Historic Resources are properties listed on the National Register of Historic Places pursuant to the National Historic Preservation Act of 1966, as amended, including, but not limited to, the Rockland Breakwater Light and Fort Knox.

The Old Tavern in Burlington, built in 1844, is listed on the National Register of Historic Places, and is within eight miles of the Passadumkeag Wind Project. The Old Tavern is a 2.5 story wooden frame structure with a gable roof, clapboard siding, and a covered porch that wraps around the front façade. The National Register nomination form, submitted in 1986, describes the tavern as a popular headquarters for hunters and fishermen in the area in its later years. It was first built to serve as a hotel for lumber crews and others who were working in the area. The building sits on a corner lot in a small town setting. In the nomination for its inclusion on the National Register, the building's relationship to the surrounding landscape is not mentioned as a significant factor; however, the integrity of the immediate setting is important to the Old Tavern. The setting around the Old Tavern is a classic cross-road village, with a church with a white steeple across the street, and private residences, open fields/greens, and additional (formerly) commercial buildings nearby. The building is 5.9 to 7.2 miles northwest of the project and separated by a dense stand of second growth vegetation. The applicant states that the turbines would not be visible presently from this site due to the intervening vegetation and that even if the turbines were to be visible, their relatively small appearance would not detract from the historic context. The primary function of the Old Tavern occurs inside the structure, and is not related to the scenic quality of the surrounding landscape. Based on its field investigation, the applicant states that the presence of the turbines should not have any visual impact on the Old Tavern.

- 3) National or state parks. There are no national or state parks within eight miles of the project.

- 4) Great ponds. A great pond is a SRSNS if it is:

- a. One of the 66 great ponds located in the State's organized area identified as having outstanding or significant scenic quality in the "Maine's Finest Lakes" study published by the Executive Department, State Planning Office in October 1989; or

- b. One of the 280 great ponds in the State's unorganized or de-organized areas designated as outstanding or significant from a scenic perspective in the "Maine Wildlands Lakes Assessment" published by the Maine Land Use Regulation Commission in June, 1987.

There are no great ponds within eight miles of the generating facilities listed in the "Maine's Finest Lakes" study. The scenic resources of three great ponds within eight miles of the project have been designated as significant in the "Maine Wildlands Lakes Assessment" (Assessment): Saponac Pond, Spring Lake, and Lower Pistol Lake. One great pond within eight miles of the generating facilities, Nicatous Lake, has been designated as outstanding from a scenic perspective in the Assessment.

SAPONAC POND

Saponac Pond (922 acres, elevation 190 feet above sea level) is two miles east of Burlington on Route 188 (Main Road). The pond is the second largest waterbody within eight miles of the generating facilities and the SRSNS closest to the project. The entire pond is within eight miles of the project. The northern third of the pond is located in Burlington; the southern portion is located in Grand Falls Township. The applicant's description of the shoreline is that it is mostly private timberland or developed for house lots. The landscape within two miles of the pond consists of gently rolling wooded hills that are drained by boggy meandering streams and rivers. Folsom Ridge, on the northeast side of Route 188, rises approximately 300 feet above the level of the pond. The most distinctive landform in the vicinity is Passadumkeag Mountain, a broad U-shaped series of ridges to the south that rises over 1,250 feet above the pond.

The applicant's VIA indicates that there would be 10 to 14 turbines visible from Saponac Pond. The applicant concludes that based on the user intercept survey results, photo-simulations, viewshed maps, and roadway plans, the turbines, seen in profile on the ridgeline of Passadumkeag Mountain, along with the visible portions of the access road, would have an adverse effect on the scenic value of Saponac Pond. However, the applicant reports that there are relatively few recreational users of the pond. The applicant describes the primary recreational uses on Saponac Pond as fishing and boating. The applicant concludes from its user intercept survey that most people would continue to return to the pond to enjoy boating, fishing, and similar recreational pursuits even with the turbines in view.

NICATOUS LAKE

Nicatous Lake (5,165 acres, elevation 347 feet above sea level) is the largest waterbody within eight miles of the project, although most of the lake is located further than eight miles from the project. The lake is located southeast of Passadumkeag Mountain in T3 ND, T40 MD, and T41 MD. Most of the shoreline is privately owned, and with the exception of several sporting camps

and private homes, is encumbered by conservation easements held by the Maine Bureau of Parks and Lands (BPL). Most of the islands in the lake are owned in fee by BPL. Nicaous Lake is a narrow waterbody approximately nine miles in length with a highly configured shoreline surrounded by low rolling hills. The northern third of the lake, which falls within eight miles of the project, is between 0.2 and 0.9 miles in width, significantly narrower than the southern portion. The closest proposed turbine to the lake is located 5.6 miles west of this portion of the lake. The landforms surrounding the northern end of the lake rise up to 150 to 225 feet above the surface of the lake. One of the most noteworthy features of Nicaous Lake is the number of wooded islands found throughout its length. The applicant states that although the axis of the northern portion of Nicaous Lake generally runs northwest/southeast, the combination of the surrounding hilly terrain and the presence of several wooded islands in this part of the lake would make it difficult to achieve a long view of the project, except along the western shore. There are no named mountains or other distinctive focal points within the foreground or midground in the viewshed from this portion of the lake.

The applicant's VIA states that between one and nine turbines would be within eight miles, and approximately eight turbines would be visible from portions of Nicaous Lake. The applicant states that based on the user intercept survey results, the photo-simulations, and the viewshed maps, the project would have an adverse effect on the scenic value of the northern third of Nicaous Lake, which is recognized in the Assessment for its outstanding scenic resources. However, the applicant contends there are moderating factors that would affect the overall scenic impact. The applicant states that the distance of the project (five to eight miles) from the lake would make the turbines appear as relatively small to medium-sized objects on the horizon, and the low hills and wooded islands between the project and the viewer would provide intermittent screening so the entire project would never be visible from any one point on the lake. The applicant concludes from its user intercept survey that most people would continue to return to the lake for boating, fishing, and similar recreational pursuits even with the turbines in view.

LOWER PISTOL LAKE

Lower Pistol Lake (979 acres, elevation 323 feet above sea level) is in T3 ND, ten miles east of Burlington and is between 4.9 and 6.2 miles from the project. Most of the land surrounding the lake is within the Passamaquoddy Indian Territory. Lower Pistol Lake is the westernmost waterbody in a chain of lakes that includes Upper Pistol Lake, Middle Pistol Lake, Side Pistol Lake, and Spring Lake. The landscape surrounding the lake consists of gently rolling wooded hills that are drained by boggy meandering streams. An unnamed hill to the southwest rises 300 feet above the lake. Logging operations have created a network of woods roads that approach the lake from Pistol Green, a break in a distinct esker two miles west of the lake. Access to the lake is over woods roads. An informal boat put-in and campsite are located in an opening at the northwestern end of the lake. The lake is undeveloped, with no camps evident

from field evaluation or aerial photographs. The Maine Atlas and Gazetteer indicates the presence of a campsite on one of the islands in the middle of the lake.

The applicant states that all 14 turbines would be visible from Lower Pistol Lake at a distance of five to eight miles. The applicant's VIA states that based on the user intercept survey results, photo-simulations, and viewshed maps, the turbines, seen in profile on the ridgeline of Passadumkeag Mountain, would have an adverse effect on the scenic value of Lower Pistol Lake. However, the applicant states that moderating factors would affect the overall scenic impact. The applicant states that the project would be visible in the background, which would make the turbines appear as relatively small to medium-sized objects on the horizon. The applicant concludes from its user intercept survey that the majority of the small number of users of the lake would continue to return to the lake to enjoy boating, fishing, and similar recreational pursuits even with turbines in view.

SPRING LAKE

Spring Lake (435 acres, elevation 336 feet above sea level) is in T3 ND, ten miles east of Burlington and is between 4.9 and 6.2 miles from the project. Spring Lake is a waterbody in a series of lakes that includes Lower Pistol Lake, Upper Pistol Lake, Middle Pistol Lake, and Side Pistol Lake. The landscape surrounding the lake consists of gently rolling wooded hills rising about 200 feet above the lake, which are drained by boggy meandering streams. A small island is located at the southern end near the boat launch. Logging operations have created a discontinuous network of woods roads that approach the lake from Pistol Green on the west. Access is over a woods road on the south side of the lake, where there is a hand-carry boat launch site. The lake appears to be largely undeveloped, with only one camp evident from field evaluation or aerial photographs.

The applicant's VIA states that based on the photo-simulations, viewshed maps, and field investigation, the blades of up to four turbines would be scarcely visible from Spring Lake, and therefore would have a very slight adverse effect on the scenic value of the lake.

WEST LAKE

A comprehensive visual analysis was not conducted by the applicant for West Lake, as it is not a SRSNS. The applicant states that there would be visual impacts to West Lake, which has a large number of camps. Camp orientation on the extensive southwest and northeast facing shorelines is not, for the most part, in the direction of the project. The applicant states that intervening vegetation and topography, coupled with the distance from project (five miles to the nearest turbine at the closest point of visibility from the lake), would limit overall visual impact. The applicant concludes that owners on the north shore would not be able to see the project.

- 5) Scenic Rivers. A segment of a scenic river or stream is a SRSNS if it is identified as having unique or outstanding scenic attributes in Appendix G of the "Maine Rivers Study" published by the Department of Conservation in 1982. There are no rivers or streams within eight miles of the proposed project that are identified in the Maine Rivers Study as having unique or outstanding scenic attributes.
- 6) Scenic viewpoints on public land or trails. A scenic viewpoint is a SRSNS if it is located on state public reserved land or on a trail that is used exclusively for pedestrian use, such as the Appalachian Trail, that the Department of Agriculture, Conservation and Forestry designates by rule. There are no scenic viewpoints located on state public reserved land within eight miles of the proposed project, and there are no trails used exclusively for pedestrian use within eight miles of the proposed project.
- 7) Scenic turnouts. A scenic turnout is an SRSNS if it has been constructed by the Department of Transportation pursuant to Title 23, section 954 on a public road that has been designated by the Commissioner of Transportation pursuant to Title 23, section 4206, subsection 1, paragraph G as a scenic highway. There are no scenic turnouts on any designated scenic highways constructed by the Department of Transportation within eight miles of the proposed project.
- 8) Scenic viewpoints located in the coastal area. To qualify as an SRSNS, a scenic viewpoint located in the coastal area, as defined by Title 38, section 1802, subsection 1, must be ranked as having state or national significance in terms of scenic quality in:
 - a. One of the scenic inventories prepared for and published by the Executive Department, State Planning Office: "Method for Coastal Scenic Landscape Assessment with Field Results for Kittery to Scarborough and Cape Elizabeth to South Thomaston," Dominic, et al., October 1987; "Scenic Inventory Mainland Sites of Penobscot Bay," Dewan and Associates, et al., August 1990; or "Scenic Inventory: Islesboro, Vinalhaven, North Haven and Associated Offshore Islands," Dewan and Associates, June 1992; or
 - b. A scenic inventory developed by or prepared for the Executive Department, State Planning Office in accordance with section 3457.

There are no scenic viewpoints located in coastal areas within eight miles of the proposed project.

B. SUPPLEMENTAL VISUAL IMPACT ANALYSIS

Following the second public meeting and at the request of the Department, the applicant submitted additional information concerning the impacts to the scenic character of Saponac Pond, as well as on the public use of the pond. One of the submissions was a movie, created from near the middle of Saponac Pond, where

the viewer could see a panoramic, 360 degree view of the pond. The movie also included simulations of the proposed turbines. The applicant also conducted further use surveys on the amount, nature and duration of the use of Saponac Pond by the public. The additional use surveys were conducted on thirteen days between August 8, 2012 and September 3, 2012. During the 86.25 hours of surveying, 24 boats, 42 boaters, and 9 incidental on-shore users were documented. The average time spent on the pond by boaters was 1.8 hours. The applicant concludes that the movie and use surveys demonstrate that the pond is developed; the pond is lightly used; the extent of the use is limited; and that the 14 wind turbines visible would not have an unreasonably adverse impact on the scenic character of Saponac Pond.

C. PUBLIC COMMENT

The Department received numerous comments from the public concerning the scenic impact of the project. The Natural Resources Council of Maine (NRCM) commented that, "Passadumkeag Mountain is a stunning visual feature that dominates and greatly accentuates the scenic quality of the resource." They noted that there is a single existing radio tower on the mountain. They also noted visible evidence of working forest use in the project area. NRCM stated that working forests are common within the unorganized territories and it was NRCM's opinion that evidence of a working forest did not detract from the scenic quality of Passadumkeag Mountain or any other feature in the area. NRCM also commented that, "The fact that 40% of users felt the project would have a negative impact and 25-30% of users thought they were less likely to return indicates a substantial impact on usage."

Several interested persons raised concern over the adverse visual impacts from the warning lights required by the Federal Aviation Administration (FAA) that would be placed on the top of some turbines. One interested person submitted a photograph of another wind power project in the state which showed the reflection of such lights on a lake. Another interested person submitted written comments stating, "the pulsating, flashing, incessant night lighting required for safety by FAA is a very large part of the unacceptable, intrusive visual scenic impact." The interested person went on to request the Department require the applicant to install an Audio Visual Warning System (AVWS). These systems are designed to turn on the warning lights as a plane approaches the turbines. At other times, the warning lights are not lit. AVWSs are not yet approved for use on wind turbines by the FAA. To address these concerns, the applicant modified its application to propose, "If the FAA finalizes the standards for these systems prior to the construction of the Passadumkeag project, the Applicant will evaluate the use of such a system for the project. If it is both technically and economically feasible and approved by the FAA, the Applicant will install a radar controlled system for this project."

One interested person submitted a petition with over 300 signatures urging the Department to deny the project based on, among other things, the negative visual impacts on the surrounding area.

D. PEER REVIEW

The Department hired David Raphael of Landworks, an independent scenic expert, to assist in its review of the Scenic Character section of the application. Mr. Raphael provided the Department with comments dated June 19, 2012 and September 7, 2012. Mr. Raphael ranked six SRSNS in his review document entitled "Review of the Passadumkeag Wind Project Visual Impact Assessment" dated June 19, 2012 and again on September 7, 2012. The six SRSNS were evaluated based on the statutory requirements of context, character significance, uniqueness, level of use, viewer expectations, visual impact and effect on public use. Mr. Raphael's analysis factored in distance from the project, duration and extent of the views, and visual absorption. Mr. Raphael rated each factor in an evaluation matrix, with a maximum point value of three, representing high potential impact on the resource, down to zero, representing no potential impact on the resource.

In addition to the matrix evaluation, Mr. Raphael provided the following comments to the Department on the six SRSNS within eight miles of the proposed project:

1) Passadumkeag Marsh and Boglands:

Only a very small portion of this area, 0.6 acres (the most southeasterly section of the bog land parcel), is within the eight miles of the project. Based on the viewshed analysis of both the applicant's VIA and the Landworks analysis of aerial photography for land cover, Mr. Raphael agrees with the applicant that it is expected that there would be no visibility of the project from this resource.

2) Old Tavern:

The Old Tavern faces Route 188 (Main Road) and is oriented in a manner that the view of its external architectural qualities as well as access to the building's interior is from the west. From this direction the project would not be visible. Mr. Raphael concludes that any potential views of the project would be in the southerly to south easterly direction; however it is unlikely that these views are possible due to the intervening vegetation and structures.

3) Saponac Pond:

Saponac Pond has been developed with camps primarily along its northeastern and northwestern shores. There are up to 50 camps and year-round homes on the shores or in the vicinity of the pond. The shoreline is wooded with hardwoods and softwoods with the exception of clearings for camps and the short section where Route 188 (Main Road) follows the shoreline. Located short distances beyond the southern shoreline of the pond are openings in the forest cover as a result of logging activity.

From Route 188, the closest turbines would be at a distance of between 4 and 4.8 miles; from the south shore of Saponac Pond the closest turbine would be at a distance of 2.3 miles. Mr. Raphael concludes that Saponac Pond, due to its proximity to the project site and the fact that there would be visibility of the project from nearly all of the surface area of the pond, would be adversely impacted by this project. He states that users boating or fishing on the pond would have the project potentially in view, with some exceptions due to the north-facing shorelines that would benefit from vegetative screening. He notes there is currently what is considered to be some inharmonious development, namely the communication tower and the timber harvesting activities, but the overall scenic rating may be attributable to the presence and prominence of the Passadumkeag Mountain itself. He acknowledges that Saponac Pond is not a pristine waterbody, and that the logging activity and existing mountaintop development contribute to the sense of the pond being in a developed area that has been used historically as a working landscape.

He states that from Saponac Pond the turbine array would be readily visible against the backdrop of sky and atmosphere. Given the horizontal extent of the project, the fact that it would be visible from most of the pond, and that the view would comprise anywhere from 31° of the panorama when viewed from the simulation site up to 62° when viewed from the middle of the pond, he concludes that this project would dominate the views that many users would experience. The project would change the mountain landscape with clearings for the turbine pads and the service roads that would connect the turbine sites. It would add a distinct and unnatural form to this mountain landscape.

Mr. Raphael reviewed whether the project visibility would greatly diminish the use and enjoyment of the users. The applicant's user intercept survey results specify that 41% of people surveyed indicate that if the project were built it would have a negative impact on their sense of enjoyment; 59% indicated it would not change their sense of enjoyment. Additionally, a number of users indicated that for several different recreational activities, such as swimming, boating, canoeing, kayaking, and ice fishing, they would still be likely to return to the pond for those recreational activities after the project is developed.

Landworks concluded that this project would most definitely result in an adverse impact to the scenic quality of Saponac Pond but not in an unreasonable adverse impact. While the project would not directly affect the physical form and character of the pond itself, the project would be prominent and alter the visual quality and sense of place for the users and camp owners. The evaluation matrix developed by Mr. Raphael indicates that the project's impact on scenic qualities and values for this lake would be a composite rating of 2.1, or a moderate impact. Mr. Raphael noted mitigating factors including: the fact that the area already has been developed; the mountain environments are not pristine; and the relatively high number of respondents in the applicant's survey who indicated the project would not have a substantial impact on enjoyment and their willingness to return.

4) Nicatous Lake:

Approximately one half of this nine mile long lake is within eight miles of the proposed project. The applicant's VIA indicates that the visibility of the project would be limited on the lake. Any visibility would be of only a few turbines in a narrow angle of view of approximately 10° when compared to an overall 360° panorama. The distance to the turbines ranges from 6.9 miles for the closest visible turbine to 9.5 miles for the most distant visible turbines from the applicant's simulation view location. Mr. Raphael concludes that the developed areas at the northern end of the lake and at Porter Cove are unlikely to have any visibility of the turbines due to the intervening vegetation and topography. Mr. Raphael states that while there would be some visibility of the project from other points on the lake within the eight-mile project radius, the distance to the nearest visible turbine is such that these turbines would be neither dominant nor serve as a focal point to draw the eye.

Passadumkeag Mountain can be discerned from viewing points within the eight-mile project radius. Mr. Raphael comments that while atmospheric conditions and landscape qualities associated with the lake and shoreline would diminish the presence of the project, the project would have the potential to result in adverse impact of the scenic qualities and values of the lake. He comments that although visibility of the project is limited by distance, the project would still add an unnatural element to the view and horizon line when seen from the shoreline or on the lake vantage points. After consideration of the applicant's user survey, in which 68% of the respondents indicated that the project would not change, or would have a positive impact on, their level of enjoyment, Mr. Raphael stated that the scale of the project's potential visual presence on this lake would not be so large as to be disconcerting and unsettling. The evaluation matrix developed by Mr. Raphael indicates that the project's impact on scenic qualities and values for this lake would be a composite rating of 1.9, or a moderate impact.

5) Lower Pistol Lake:

Mr. Raphael observes that the general context for this particular lake is one of an undeveloped, remote pond; however, there is evidence of surrounding timber harvesting and forest resource management. With the surrounding low relief of this pond and the wooded nature of the shoreline, this area is not particularly unique nor does it rise to the level of being distinctive with regard to other similar lakes in the region. The lake is considered generally remote as it is only reachable by four-wheel drive or by snowmobile in the winter. The distance to the nearest turbine from this lake is over five miles at the northern end of the lake. Mr. Raphael concludes that on those portions of the lake where the turbines are visible, the range of view is approximately eight degrees when compared to an overall 360° panorama.

Mr. Raphael considered the applicant's user survey, which stated that 62% of respondents indicated that their enjoyment of the pond would not be affected by the turbines.

Based on the limited extent of potential project visibility on this lake; the fact that a small percentage of the panorama would be occupied by the project; and consideration of a lack of impact on the quiet and solitude that the lake provides, Mr. Raphael's matrix result was a 1.4 and he concludes that there would be a low to moderate impact.

6) Spring Lake:

Mr. Raphael comments that Spring Lake is another seemingly remote, undeveloped pond, surrounded by both wetland systems and timber harvest operations. The shoreline is wooded with spruce, pine and northern hardwoods, and much like Lower Pistol Lake the topography around the lakes is comprised of low lands and low ridges with elevation differences of about 200 to 250 feet above the lake surface. The lake is primarily accessible with four-wheel drive or by snowmobile in the winter. When topography and vegetation are taken into account, Mr. Raphael's viewshed analysis yields the conclusion that only a small portion of the lake, approximately 15% of the surface and shoreline area, would have visibility of the proposed project turbines from hub height and above. He concludes that visual impacts to Spring Lake resulting from this project would be minimal, if discerned at all. He commented that users of this lake would need to be, for the most part, looking in the right direction and would need to know what they were looking for in order to see the project.

Mr. Raphael's evaluation matrix yielded a score of 1.1, and given the distance to the project, the minimal visibility, the lack of users and difficult access, as well as the fact that the lake is not an outstanding scenic landscape, he concludes that it appears that the project's impacts would barely be adverse and the overall impact to scenic quality would be low.

The applicant's VIA determined that the access roads, crane paths, turbine pads and O&M building have a minimal possibility of being seen from any SRSNS or other public area. The applicant's study concluded that these associated facilities would not have an unreasonable adverse effect on scenic character and existing uses. Mr. Raphael and the Department reviewed this portion of the VIA and concur with the applicant's analysis.

E. PEER REVIEW OF THE SUPPLEMENTAL VISUAL IMPACT ANALYSIS

Mr. Raphael also reviewed the additional information provided by the applicant on the visual impacts to Saponac Pond. In that review, Mr. Raphael states, "Given the local recognition of Passadumkeag Mountain as an important regional landmark, a consideration that was not readily understood until the public [meetings], it is possible that one could reach the conclusion that the impact to this landmark could

be considered unreasonable.” However, Mr. Raphael notes that Passadumkeag Mountain itself is not a SRSNS and that Saponac Pond is lightly used.

F. DEPARTMENT ANALYSIS AND FINDINGS

The Department considered the evidence on scenic impacts submitted by the applicant and by members of the public, information gathered during two public meetings, the comments of its independent scenic expert, observations made during site visits and the evidence gathered by staff. Department staff conducted three site visits over the course of the evaluation of this application, with two of those site visits specifically including Saponac Pond.

- 1) Saponac Pond. During the course of its analysis of the evidence, on July 23, 2012, the Department requested the applicant to supplement the original VIA with additional information on potential scenic impacts of the proposed project to Saponac Pond. The Department specifically requested an additional photo-simulation be made from the pond near the southern shore which would be representative of views of users on the pond. In the original application, the applicant included a photo-simulation taken from the northern shore of the pond, near the boat launch on Route 188. The Route 188 location is approximately 4 to 4.8 miles from the closest turbine; ten turbines would be visible from that location and they would span approximately 52 degrees of the panorama. The south shore of Saponac Pond is approximately 2.3 miles from the closest turbine. Instead of an additional photo-simulation from near the southern shore, the applicant submitted as part of the Supplemental VIA a movie simulation from a location near the middle of Saponac Pond, approximately three miles from the nearest turbines. From this location in the middle of Saponac Pond, all fourteen turbines would be visible and they would span approximately 62 degrees of the panorama. Based on the applicant’s movie, it appears that closer to the south shore of the pond all fourteen turbines would still be in view. The turbines would appear larger and they would span an even greater angle of view than as viewed from the boat launch on Route 188.

Department staff visited Saponac Pond on July 12, 2012, and September 6, 2012. During these site visits, Department staff observed the viewsheds from around the pond and on the pond, respectively, and the level of existing development around the shoreline. From the boat launch on Route 188 the view of Passadumkeag Mountain does not include views of the developed portions of the pond. In order to view the developed portions of the pond one has to be on the pond and looking away from Passadumkeag Mountain. The applicant’s scenic consultant and the Department’s independent scenic expert considered the developed portion of the shoreline and the mountain to be inharmonious development, and a mitigating factor for the scenic impact of the project. Both commented that the developed area would lessen the impact of the proposed development as it is not a pristine pond. The Department’s analysis, however, takes into account the fact that the view from Saponac Pond looking south toward the ridge of Passadumkeag Mountain is essentially devoid

of any residential structures. Moreover, the existing radio tower on the ridge is a very minor visual impact and takes up only a very small percentage of the horizon. While the northern slope of Passadumkeag Mountain shows evidence of some logging activities, the Department does not consider these indications of logging activities as having a significant impact on the scenic character of the viewshed from Saponac Pond. The Department finds that these factors create a more natural setting than is portrayed by the applicant's VIA and Mr. Raphael's comments on development, and that the predominant existing scenic character of the viewshed from Saponac Pond in the direction of the proposed project is undeveloped.

In its analysis of the proposed project's potential effect on scenic character and related uses, the Department considered the six criteria in 35-A M.R.S.A. §3452 (A) through (F) and made the following findings regarding Saponac Pond:

- (A) Significance of the SRSNS: The Department received comments from many people throughout the review process of this application indicating that Saponac Pond is a valued and regionally significant scenic resource based on its boating, fishing and recreational uses, all of which are enhanced by the scenic quality of the views toward Passadumkeag Mountain. The Department finds that this pond is distinctive for its views of Passadumkeag Mountain in an area that does not have many comparable views.
- (B) Existing character of surrounding area: Based on two site visits to Saponac Pond, the applicant's VIA and supplemental VIA, and aerial photographs of the area surrounding the pond, the Department concludes that the viewshed from Saponac Pond to Passadumkeag Mountain is undeveloped. The Department agrees with its scenic expert's conclusion that the turbine array would be readily visible against the backdrop of sky and would dominate the views that many users would experience. The project's turbines, clearings for the turbine pads and service roads connecting the turbine sites would change the mountain landscape. They would add a distinct and unnatural form to this primarily natural mountain landscape. Therefore, the Department finds that the construction of this project on Passadumkeag Mountain would result in a significant change to the existing scenic character of Saponac Pond.
- (C) User expectations: In the applicant's user intercept survey for Saponac Pond, respondents were asked to evaluate their expectations for 1) the number of people that may also use the pond, and 2) the level of development they will see along the pond. Most respondents expressed the view that they expect the lake to be uncrowded, and that they expect the pond to be undeveloped. The Department concludes that the proposed project would have a substantial effect on users' expectations of Saponac Pond, since the proposed project would dramatically change the level of development as viewed from the pond.

- (D) Project purpose and context: The purpose of the project is to generate electricity through the construction of wind turbines on Passadumkeag Mountain. The setting around the proposed project is a mostly undeveloped mountain that dominates the view from Saponac Pond that includes minimal development in the views of Passadumkeag Mountain.
- (E) Nature of uses and effects on public use and enjoyment: Based on the user surveys submitted by the applicant, the primary uses of Saponac Pond are boating and fishing. The Department finds that the number of people using the resource should not be determinative, as in many cases a small number of users heighten the users' enjoyment of the resource, especially in regard to the enjoyment of the aesthetics of the place. The fact that the pond may not be used by a large number of people does not diminish the importance of the limited users of the pond. The applicant's materials demonstrate that a majority of the turbines would be visible from 97% of Saponac Pond. Thus, users of the pond would have views of the turbines for the duration of their visits. Upon review of the applicant's user intercept surveys, the Department finds that the 41% of respondents that indicated that the proposed project would have a negative impact on their enjoyment of the pond is a substantial percentage.
- (F) Scope and scale: Passadumkeag Mountain is the dominant visual feature as viewed from Saponac Pond. As stated above, the Department finds that all 14 turbines would be visible from a majority of the views on Saponac Pond. Some of the turbines would be as close as 2.5 miles from the pond; therefore these prominent features of the development would comprise large aspects of the views from the pond. The extent of the view would range from 52 degrees to 62 degrees of the total panorama. Based on the topography of the area and the dominance of Passadumkeag Mountain in the most scenic aspect of the landscape, the Department finds that the construction of the proposed project on the mountain's ridge would have a significant impact on the scenic character of Saponac Pond.
- 2) Other SRSNS. The Department finds that the generating facilities portion of the project would not have an unreasonable adverse effect on scenic character or existing uses related to scenic character of the other SRSNS; specifically, the Passadumkeag Marsh and Boglands, the Old Tavern, Nicaous Lake, Lower Pistol Lake, Spring Lake or West Lake.

The Department finds that the applicant has made reasonable accommodations to fit the associated facilities portion of the development into the natural environment and that this aspect of the project alone would not have an unreasonable adverse effect on scenic character or existing uses related to scenic character of scenic resources of state or national significance, or other existing uses in the area.

In enacting the Site Law and the NRPA the Legislature found that Maine's great ponds have great scenic beauty and unsurpassed recreational and environmental value to citizens of the State. The Legislature voiced its concern about the substantial threat posed by the potential cumulative effect of frequent minor and occasional major impacts to these resources. The Department considers existing impacts to a resource in assessing whether the additional impacts of a proposed project affecting the resource would be unreasonable. The review of topographical maps and a staff site visit to Saponac Pond showed that nine turbines from the Rollins Wind project, which is located in the towns of Lincoln, Burlington and Lee, are clearly visible from Saponac Pond. These turbines are visible to the north to users of Saponac Pond. The applicant's proposed project would add another 14 turbines which would be visible, making a total of 23 turbines visible from most of Saponac Pond. This would result in a substantial increase in the portion of the panorama that would contain wind turbines as seen from a SRSNS. In the Wind Energy Act the Legislature includes the number of wind turbines visible from a SRSNS as a factor to be considered in an assessment of visual impacts. In this case Saponac Pond has already sustained an impact to its scenic character from the construction of the Rollins Wind project turbines nearby. The cumulative impact on the scenic character and the uses related to scenic character that would result from the addition of 14 turbines visible on the opposite side of the pond would be an unreasonable adverse impact given the nature and scenic qualities of Saponac Pond.

The Department finds that the generating facilities portion of the project would have an unreasonable adverse effect on the scenic character and the existing uses related to the scenic character of Saponac Pond. As set forth above, the Department has not based the determination that the proposed project has an unreasonable adverse effect on the scenic character of Saponac Pond solely on a finding that the generating facilities are a highly visible feature in the landscape. The resource's significance to its users, the predominant role of the mountain itself in the value of the scenic resource, the expectations of the viewers, and the nature of the affected uses all form the basis of the finding of an unreasonable adverse impact.

7. WILDLIFE AND FISHERIES:

Applicants for Site Law and NRPA permits are required to demonstrate that the proposed project would not unreasonably harm wildlife and fisheries; any significant wildlife habitat; freshwater plant habitat; threatened or endangered plant habitat; aquatic or adjacent upland habitat; travel corridor; freshwater, estuarine or marine fisheries; or other aquatic life. The applicant submitted the results of a series of ecological field surveys conducted by Stantec Consulting (Stantec), including wildlife surveys; wetland delineations; rare, threatened, and endangered plant and animal species surveys; and vernal pool surveys within the project area, including the area affected by the 17-mile generator lead line. During the preparation of the surveys and other material in support of the application, Stantec consulted with the Department and other natural resource review agencies.

- A. Significant Vernal Pools. Stantec conducted vernal pool surveys within the project area in the spring of 2011. Stantec identified one vernal pool within the transmission line portion of the project area which would be being impacted by clearing. The clearing would impact less than 25% of the critical terrestrial habitat of the vernal pool and those impacts have been approved under Permit-By-Rule (PBR) #53622.
- B. Inland Waterfowl and Wading Bird Habitat. The turbine portion of the project would not impact any Inland Waterfowl and Wading Bird Habitat (IWWH).

The proposed transmission line would cross three sections of IWWH. Two of the crossings would result in an increase of more than 10% of the developed area and would result in a total impact of 9,800 square feet adjacent to existing cleared area and adjacent to a road. The impacts to a third area of IWWH, which result in an increase of less than 10% of the developed area, meet the standards of Chapter 305, Section 20, and were permitted under PBR #53671.

The applicant proposes to construct the transmission line to be compliant with the U.S Fish and Wildlife Department's Avian Protection Plan (APP) Guidelines. This would include cutting only vegetation that could grow to within 15 feet of a conductor in the next three to four years. If possible the applicant would leave two to three snags within the collection line corridor to provide nesting habitat. The applicant would also locate poles in upland areas whenever possible in order to minimize impacts to the IWWHs.

The Department finds that the impacts to IWWHs have been minimized by the proposed vegetation management plan and the effort to locate poles in upland areas.

- C. Deer Wintering Area. Neither the generating facilities nor the transmission line portions of the project would impact any Deer Wintering Areas as defined under the NRPA.
- D. Rare, Threatened, and Endangered Species. Stantec conducted a survey of the area within two miles of the proposed project for plant and animal species that are state or federally listed as Rare, Threatened, or Endangered. No Rare, Threatened or Endangered plant or animal species were found.
- E. Salmon Habitat Streams. The proposed transmission line would cross 13 streams that contain, or may contain, habitat for Atlantic Salmon. As described in Finding 9 below, the applicant has proposed buffers adjacent to those streams to minimize any impacts to the habitat.
- F. Birds and Bats. The applicant retained Stantec to conduct bird and bat surveys to identify which species occurred in the area of the proposed project; the extent of the use of the site by such species; and potential impacts of the proposed project. Stantec conducted specific avian surveys, including raptor migration surveys and

eagle use surveys. It also compiled a list of bird species observed on the site. In the spring of 2011, Stantec conducted 20 nights of nocturnal radar studies, acoustic bat surveys, and raptor migration surveys. In the summer of 2011, breeding bird surveys were conducted. In the fall of 2011, 12 days of raptor surveys were conducted. In addition to the fall 2011 surveys, 12 survey days were conducted in late August/early September and mid-October/early November to document eagle activity and migration.

The majority of the bat calls identified were of the *Hoary* bat family (957 out of 1133 calls), followed by unknown calls (76 out of 1133), and *Myotis* species (48 out of 1133). A total of 171 observations of raptors were documented. Three bald eagles were observed.

MDIFW recommends that, to minimize potential impacts to bat species found at the project site, operational control measures should be established for the proposed project. MDIFW recommends that the applicant be required to curtail the cut-in speed for all turbines to 5.0 meters per second (m/s) between April 20 and October 15 from one half-hour before sunset to one half-hour after sunrise. Under this recommendation, during times when the winds are less than the 5.0 m/s threshold, turbine blades would not rotate, thus reducing the risk of fatality for bats. If at any point during this time period the wind speed increases to greater than 5.0 m/s, the turbine blades would be free to rotate. MDIFW recommends that these curtailment measures be in place from day one of operation for the life of the project.

After consultation with MDIFW regarding curtailment and the potential for bat mortality, the applicant agreed to seasonal curtailment of the turbine cut-in speed to 5.0 m/s on all turbines from one half-hour before sunset to one half-hour after sunrise for the life of the project. The applicant proposes that this curtailment be required from May 1 to September 30, and only when the ambient temperature is above 50 degrees F from June 1 to August 31, and when above 32 degrees F in May and September. If at any point during this time period the wind speed increases to greater than 5.0 m/s the turbine blades would be free to rotate. MDIFW has commented that this level of curtailment would be adequate.

Regarding post-construction monitoring of bird and bat mortality, MDIFW further stated that assuming an April 20 to October 15 search window, MDIFW would consider it adequate for searches to take place weekly between April 20 and May 31 and daily between June 1 and September 30, with a return to a weekly schedule from October 1 through October 15. The applicant responded that because post-construction monitoring at wind power projects is an evolving science, they will work with MDIFW to finalize a monitoring methodology prior to the start of operation. MDIFW agreed to work with the applicant to develop a final monitoring methodology.

The Department finds that impacts to birds and bats have been minimized provided the applicant complies with the curtailment requirements above and submits a final mortality monitoring methodology to the Department for review and approval prior to the commencement of operation.

No fisheries impacts are anticipated from the proposed project.

The Department finds the project would not result in an unreasonable impact on fisheries and wildlife or habitat protected by the NRPA provided turbine operation is curtailed as outlined above. If post-construction monitoring indicates an unreasonable impact on birds, bats and/or raptors, the Department, in conjunction with MDIFW, may require modified operation of the wind project, including the curtailment of turbines, as necessary.

8. HISTORIC SITES AND UNUSUAL NATURAL AREAS:

The Maine Historic Preservation Commission (MHPC) reviewed the proposed project and stated that it would have no effect upon any structure or site of historic, architectural, or archaeological significance as defined by the National Historic Preservation Act of 1966.

The Maine Natural Areas Program (MNAP) database does not contain any records documenting the existence of rare or unique botanical features on the project site and, as discussed in Finding 7, MDIFW did not identify any unusual wildlife habitats located on the project site.

Based on information in the application, MHPC's review, and MNAP's review, the Department finds that the proposed project would not have an unreasonably adverse effect on the preservation of any historic sites or unusual natural areas either on or near the project site.

9. BUFFER STRIPS:

The applicant proposes six basic buffer strip types around access roads, turbine pads and the generator lead line for storm water management, habitat protection, phosphorus control and waterbody protection. Buffers for the proposed development would include no disturbance buffers around roads and turbines, stream buffers, Atlantic Salmon stream buffers, Significant Vernal Pool buffers, and Inland Waterfowl and Wading Bird Habitat buffers. The generator lead line ROW would be continuously vegetated with grass and shrubs, and several methods would be used to maintain buffers along the corridor. The applicant would maintain these buffers according to the proposed Vegetation Management Plan. All buffer strips would be clearly marked prior to construction.

A. Access Road, Crane Path and Turbine Buffers. The applicant proposes to maintain forested buffers along the access road and around the turbines. Forested buffers provide both a visual screen and stormwater and phosphorus treatment. The stormwater and phosphorus treatment measures are more fully described in Finding 11. Most of the area around the turbine pads would be revegetated after construction is completed, providing additional buffering.

- B. Stream Buffers. There are 18 streams along the generator lead line, five of which have standard stream buffers proposed. These buffers are 25 feet wide, measured from the top of the bank of the stream. No poles are proposed to be located in the stream buffer areas. During initial construction, any vegetation that must be removed would be removed by hand-cutting or by traveling or reaching into the buffer using low-ground-pressure mechanized harvesting equipment. Following construction, any disturbed areas within the stream buffers would be graded to the original contour and stabilized with permanent seeding.
- C. Salmon Stream Buffers. There are 13 streams in the project area which contain, or may contain, habitat for Atlantic Salmon. Buffers around these streams are 100 feet wide and only trees that are capable of growing within 15 feet of the conductor within the next 3 years would be removed. The applicant has attempted to place poles as close to the edge of these buffers as is practical, thereby elevating the line above the stream to the greatest extent and reducing the number of trees that must be removed. Topping of trees is the preferred method of vegetation maintenance unless the tree is dead or dying. No other vegetation would be removed. Removal of capable species would be by hand-cutting or with low-ground-pressure tree harvesting equipment. No refueling, including refueling of chain saws, would be allowed in the Salmon Stream Buffers.
- D. Significant Vernal Pool (SVP) Buffers. One SVP would be impacted by the generator lead line. The applicant has proposed to maintain a minimum 100-foot vegetated buffer around this pool. Due to the limited reach of harvesting equipment, access ways may be needed to remove capable vegetation. Low-ground-pressure harvesting equipment would enter the buffer in a manner intended to minimize disturbance. Mats would be utilized if necessary to prevent excessive rutting or other soil disturbance. No equipment would travel within the SVP depression. Only capable species greater than eight to 10 feet tall would be removed. Clearing would not take place between April 1 and June 30 of any calendar year within 25 feet of the vernal pool depression or with any wheeled or tracked equipment.
- E. Inland Waterfowl and Wading Bird Habitat (IWWH). The generator lead line crosses three IWWHs along its proposed route. During initial construction, the applicant proposes to only remove capable species. Topping of trees is the preferred method of vegetation maintenance unless the tree is dead or dying. No other vegetation would be removed. Removal of capable species would be by hand-cutting or with low-ground-pressure tree harvesting equipment. Where possible, the applicant would leave two to three snags per 500 linear feet of corridor to provide nesting habitat for waterfowl. Initial ROW clearing would be done during frozen conditions whenever practical. No clearing would take place between April 15 and July 15 in any calendar year, unless approved by the Department and MDIFW.
- F. Vegetation Management Plan (VMP). The applicant submitted a Post-Construction Vegetation Plan for the Passadumkeag Wind project, prepared by Stantec Consulting, dated October 2011, which includes routine maintenance along the

ROW to prevent vegetation from getting too close to the conductor. The plan summarizes vegetation management methods and procedures that would be utilized by the applicant for the transmission line corridor and collector lines. The plan describes restrictive maintenance requirements for natural resources and significant wildlife habitats. The plan also includes procedures for managing or removing osprey nests built on power line structures, describes a system for identifying restricted areas, and summarizes training requirements for construction personnel.

The Department finds that the applicant has made adequate provision for buffer strips based on the post-construction VMP and the proposal to clearly mark on the ground, prior to construction, all visual screening buffers, stream buffers and other resource buffers, and the stormwater buffers. Additionally, prior to operation, the applicant must record all deed restrictions for stormwater buffers and submit the recorded deeds along with plot plans to the Department within 60 days of recording.

10. SOILS:

The applicant submitted a soil survey map and report and a geotechnical report based on the soils found at the project site. The report was prepared by a certified soil scientist and reviewed by staff from the Department's Division of Environmental Assessment (DEA) of the Bureau of Land and Water Quality (BLWQ). DEA also reviewed the applicant's Blasting Plan (dated February 2012), which outlines the proposed procedures for removing rock and ledge, and submitted the following comments:

"The copy of the blasting plan received for review does not include a standard for ground vibration, although the proposed standards for air overpressure, flyrock control, and record keeping are generally consistent with those required by the Department. Prior to construction, the applicant must prepare and submit for review and approval a revised blasting plan including the Department blasting standards in 38 M.R.S.A. §490-Z(14), and specifically stating that ground vibration at offsite structures may not exceed the limits shown in Figure B-1 of Appendix B, U.S. Bureau of Mines Report of Investigations 8507."

DEA also stated that the application does not contain a procedure to deal with any potentially reactive rock that may be encountered during construction, but based on a site visit, did not expect large volumes of this material to be encountered. Small amounts of reactive rock may be managed successfully by segregating the potentially reactive rock types from other rock types that are acceptable for use in well-drained fill slopes or road beds, and burying the reactive rock in other areas of the site that do not discharge to nearby surface waters.

Based on the applicant's soils reports and blasting plan, and DEA's review comments, the Department finds that the soils on the project site present no limitations to the proposed project that cannot be overcome through standard engineering practices provided that prior to construction, the applicant must submit a revised blasting plan to the BLWQ for review and approval.

11. STORMWATER MANAGEMENT:

The proposed project includes approximately 21.47 acres of impervious area and 97.38 acres of developed area. It lies within the watersheds of the Passadumkeag River, Saponac Pond and Great Pond. The applicant submitted a stormwater management plan based on the Basic, General, Phosphorus, and Flooding standards contained in Department Rules, Chapter 500. The proposed stormwater management system consists of vegetated buffers for the turbine sites and underdrained soil filters at the O&M building.

A. Basic Standards:

- 1) Erosion and Sedimentation Control: The applicant submitted an Erosion and Sedimentation Control Plan (Section 14 of the application) that is based on the performance standards contained in Appendix A of Chapter 500, and the Best Management Practices outlined in the Maine Erosion and Sediment Control BMPs, which were developed by the Department. This plan and plan sheets containing erosion control details were reviewed by, and revised in response to the comments of, the Division of Watershed Management (DWM) of BLWQ.

Erosion control details must be included on the final construction plans and the erosion control narrative must be included in the project specifications to be provided to the construction contractor.

- 2) Inspection and Maintenance: The applicant submitted a maintenance plan that addresses both short- and long-term maintenance requirements. This plan was reviewed by, and revised in response to the comments of, DWM. The maintenance plan is based on the standards contained in Appendix B of Chapter 500. The applicant would be responsible for the maintenance of all common facilities including the stormwater management system.
- 3) Housekeeping: The applicant states that the proposed project would comply with the performance standards outlined in Appendix C of Chapter 500.

Based on DWM's review of the applicant's erosion and sedimentation control plan and maintenance plan, the Department finds that the proposed project would meet the Basic Standards contained in Chapter 500(4)(A), provided the applicant conducted a pre-construction meeting and retained a third-party inspector to oversee project construction.

B. General and Phosphorus Standards:

The General Standards must be met for the portion of the project which drains to the Passadumkeag River.

The applicant's stormwater management plan includes general treatment measures to mitigate for the increased frequency and duration of channel erosive flows due to

runoff from smaller storms, provide for effective treatment of pollutants in stormwater, and mitigate potential temperature impacts. The portion of the proposed project which drains to the Passadumkeag River is a road that meets the definition of "a linear portion of a project" in Chapter 500. For that area, the applicant is proposing to control runoff volume from no less than 75% of the impervious area and no less than 50% of the developed area.

The forested, no-disturbance stormwater buffers are proposed to be protected from alteration through the execution of a deed restriction. The applicant proposes to use the deed restriction language contained in Appendix G of Chapter 500 and submitted a draft deed restriction that meets Department standards. The Declaration of Restrictions must be recorded prior to the start of operation, and the applicant must submit a copy of the recorded deed restriction including the plot plan to the Department within 60 days of its recording. Prior to beginning construction in an area, the location of forested buffers must be permanently marked on the ground. Methods of marking on the ground must include, but are not limited to, a combination of field flagging and clearly marked permanent signage.

The following minor adjustments may be made during construction without advance notice to the Department provided they do not impact protected resources and are reflected in the final as-built drawings: changes that result in a reduction in impact and/or footprint (such as a reduction in clearing or impervious area, and elimination of structures or a reduction in structure size); location of a structure within the identified clearing limits; the type of foundations used; additional drainage culverts, level spreaders or rock sandwiches; changes to culvert size or type provided that the culvert does not convey a regulated stream and that the hydraulic capacity of the substitute culvert is greater than or equal to that of the original; and changes of up to 10 feet in the base elevation of a turbine vertically as long as the change in elevation does not result in increased visual impacts or changes to the stormwater management plan.

Additionally, the following minor adjustments may be made upon prior approval by the third-party inspector or Department staff, and do not require a revision or modification of the permit but must be reflected in the final as built drawings: minor changes that do not increase overall project impacts or project footprint and which do not impact any protected resources as long as any new areas of impact have been surveyed for environmental resources and do not affect other landowners. These changes include adjustments to horizontal or vertical road geometry that do not result in changes to the stormwater management plan; a shift of up to 100 feet in a turbine clearing area; and adjustments to culvert locations based on field topography.

The portions of the project which drain to Saponac Pond and Great Pond are required to meet the Phosphorus Standards.

Because of the proposed project's location in the watersheds of Saponac Pond and Great Pond, the applicant proposes to treat stormwater runoff from the project site

to meet the phosphorus standard outlined in Chapter 500(4)(C). The applicant's phosphorus control plan was developed using methodology developed by the Department and outlined in "Phosphorus Control in Lake Watersheds: A Technical Guide for Evaluating New Development". For this project, the Permitted Phosphorus Export is 18.0123 pounds of phosphorus per year for Saponac Pond and 7.0650 pounds of phosphorus per year for Great Pond. The applicant proposes to remove phosphorus from the project's stormwater runoff by utilizing buffers, as shown on the set of plans referenced in Finding 1. The predicted phosphorus export for the project site based on the applicant's model is 17.8462 pounds per year of phosphorus for Saponac Pond and 7.0626 pounds per year of phosphorus for Great Pond. The Department finds that the proposed stormwater treatment would be able to reduce the export of phosphorus in the stormwater runoff below the maximum permitted phosphorus export for the site.

The stormwater management system proposed by the applicant was reviewed by, and revised in response to comments from, DWM. After a final review, DWM commented that the proposed stormwater management system is designed in accordance with the Chapter 500 General and Phosphorus Standards provided that prior to beginning construction in an area, the location of forested buffers must be permanently marked on the ground and the deeds for the forested, no disturbance buffers are recorded in the registry of deeds prior to the start of operation and submitted to the Department within 60 days of recording.

Based on the stormwater system's design the Department finds that the applicant has made adequate provision to ensure that the proposed project would meet the Chapter 500 General and Phosphorus Standards.

C. Flooding Standard:

The applicant is proposing to utilize a stormwater management system based on estimates of pre- and post-development stormwater runoff flows obtained by using Hydrocad, a stormwater modeling software program that utilizes the methodologies outlined in Technical Releases #55 and #20, U.S.D.A., Soil Conservation Service, and retains stormwater from 24-hour storms of 2-, 10-, and 25-year frequency. The post-development peak flow from the site would not exceed the pre-development peak flow from the site and the peak flow of the receiving waters would not be increased as a result of stormwater runoff from the development site.

DWM commented that the proposed system is designed in accordance with the Flooding Standard contained in Chapter 500(4)(E) .

Based on the system's design and DWM's review, the Department finds that the applicant has made adequate provision to ensure that the proposed project would meet the Chapter 500, Flooding Standard for peak flow from the project site, and channel limits and runoff areas.

The Department further finds that the proposed project would meet the Chapter 500 standards for: (1) easements and covenants; (2) management of stormwater discharges;

(3) discharge to freshwater or coastal wetlands; and (4) threatened or endangered species.

12. GROUNDWATER:

The project site is not located over a mapped sand and gravel aquifer. The proposed project does not propose any withdrawal from, or discharge to the groundwater except for a single septic system described in Finding 14.

The applicant submitted a Spill Prevention, Control and Countermeasures plan (SPCC) detailing steps to be taken to prevent groundwater contamination during construction, however the applicants did not submit an SPCC plan for on-going operation of the project. The applicant stated that potential contamination during construction would be fuel and hydraulic and lubricating oils used in operation vehicles and construction equipment. The SPCC plan includes general operational requirements, storage and handling requirements, and training requirements to prevent spilling of oil, hazardous materials or waste. The plan also sets out spill reporting and cleanup requirements should such an event occur. No herbicides would be used, stored, mixed or transferred between containers within designated buffers or within 25 feet of streams or wetlands with standing water. Designated buffers and areas within 25 feet of streams and wetlands with standing water must be flagged prior to construction.

Prior to operation of the development, the applicant must submit an operational SPCC Plan for the on-going operation of the project to the Department for review and approval.

The Department finds that the proposed project would not have an unreasonable adverse effect on ground water quality provided the applicant flags designated buffers and areas within 25 feet of streams and wetlands with standing water and submits, prior to operation, the operational SPCC Plan to the Department for review and approval.

13. WATER SUPPLY:

Water for the development would be supplied by an individual well at the O&M building. The applicant submitted an assessment of groundwater supplies that are available on the project site. This assessment was prepared by a certified geologist and was reviewed by, and revised in response to comments from, the DEA.

The applicants also propose to use up to 20,000 gallons of water per day for dust control. DEA reviewed this portion of the application and stated that this water could be drawn from one or more of the lakes in the project vicinity without affecting the water level of the lake, but the applicant should identify, prior to construction, the access points for trucks to obtain water from the lake(s), in order to ensure that all points are stable locations suitable for repeated access by large vehicles without creating excessive erosion or issues with bank stability, such as boat ramps or bridges.

The Department finds the applicant has made adequate provision for securing and maintaining a sufficient and healthful water supply, provided the applicant identifies locations for water withdrawal for dust control prior to construction.

14. WASTEWATER DISPOSAL:

Wastewater would be disposed of by an individual subsurface wastewater disposal system located at the O&M building. The applicant submitted the soil survey map and report discussed in Finding 10. The individual system would be designed to meet the requirements of the Maine State Plumbing Code. Based on a review of the information submitted by DEA, a subsurface wastewater disposal system capable of handling septic waste from the O&M building could be constructed on this site.

The Department finds the applicant has made adequate provisions for wastewater disposal.

15. SOLID WASTE:

When completed, the proposed project is anticipated to generate minor amounts of general solid waste per year. All general solid wastes from the proposed project would be disposed of at Penobscot Energy Recovery Company (PERC), which is currently in substantial compliance with the Maine Solid Waste Management Rules.

All marketable timber would be removed from the project site. A single one-acre stump dump may be located on the project site. All stumps and grubblings generated would be disposed of on site, either chipped or burned, with the remainder to be worked into the soil, in compliance with the Maine Solid Waste Management Rules.

The proposed project would generate approximately 465 cubic yards of construction debris and demolition debris. All construction and demolition debris generated would be disposed of at Juniper Ridge, which is currently in substantial compliance with the Maine Solid Waste Management Rules.

The Department finds the applicant has made adequate provisions for solid waste disposal.

16. FLOODING:

The applicants do not propose any structure other than three poles within a flood zone. As discussed in Finding 11, the Department has reviewed the applicant's plans for stormwater management and found that the project is unlikely to have an adverse impact on downstream flooding. Based on the nature of the project and the minimal number of structures in the flood zone, the Department finds that the proposed project is unlikely to cause or increase flooding or cause an unreasonable flood hazard to any structure.

17. WETLAND IMPACTS:

The applicant retained Stantec to locate wetlands and waterbody resources on the proposed project site. The results of the applicant's surveys for wetlands and waterbodies which may be affected by the turbine sites, access roads and collector lines are summarized as follows:

- 173 wetlands were identified along the proposed access roads and the electrical collector line.
- 35 jurisdictional streams were identified, including 23 perennial streams. No streams are proposed to be crossed.
- 67 vernal pools were identified, including 3 significant vernal pools, and 4 potentially significant vernal pools, only one of which would be impacted, as discussed in Finding 7.
- 34 wetlands were identified that meet the definition of wetlands of special significance.

Freshwater Wetland Impacts.

The applicant is proposing 1.2 acres of vegetation conversion in wetland areas for the turbine sites, access roads and collector lines. No permanent loss of freshwater wetland through filling is proposed.

The Department's Wetlands and Waterbodies Protection Rules, Chapter 310, provide the framework for the Department's analysis of whether a proposed project's impacts to protected resources would be unreasonable, as that term is used in the NRPA, and whether the project meets the NRPA licensing criteria. A proposed project's impacts may be found to be unreasonable if the project would cause a loss in wetland area, functions and values and for which there is a practicable alternative that would be less damaging to the environment. For this aspect of the Department's review an applicant must provide an analysis of alternatives to the project.

- A. Avoidance. The applicant submitted an alternatives analysis for the wetland and stream impacts of the proposed project, completed by Stantec Consulting, and dated February, 2012. The applicant states that the proposed project was designed to avoid wetlands to the greatest extent possible and the applicant proposes to site the proposed turbines and associated access roads in predominantly upland areas. The applicant used existing roads when possible to avoid any new impacts to natural resources. Any new roads that were necessary were designed to avoid wetlands if practical. The construction and maintenance of the electrical transmission line would primarily result in a permanent change in vegetation cover type in wetland areas.
- B. Minimal Alteration. In the determination of whether any adverse impacts from a project are unreasonable, the Department looks at whether the amount of wetland and waterbodies to be altered have been kept to the minimum amount necessary for meeting the overall purpose of the project. The applicant is proposing construction practices to reduce erosion, maintain stream and vernal pool buffers, and to reduce

habitat fragmentation by the proposed co-locating of the majority of the generator lead transmission line. Prior to the start of construction, the location of stream buffers, wetlands, IWWH, and vernal pool buffers must be marked on the ground.

- C. Compensation. Compensation may be required to achieve the goal of no net loss of wetland functions and values. The applicant submitted an assessment of the functions and values of wetlands impacted by the proposed project, prepared by Stantec. The assessment determined that the primary functions and values of the potentially impacted wetlands were wildlife habitat, with some levels of floodwater alteration, sediment/toxicant retention, and production export. In this case, it appears that the conversion of the vegetative cover type in wetlands potentially affected by the project would not result in a loss of functions and values so compensation would not be required.

The Department finds the applicant has avoided and minimized wetland and water body impacts to the greatest extent practicable, and that the proposed project represents the least environmentally damaging alternative that meets the overall purpose of the project, provided that prior to the start of construction, the location of stream buffers, wetlands, IWWH, and vernal pool buffers must be marked on the ground.

18. SHADOW FLICKER:

In accordance with 38 M.R.S.A. §484(10), an applicant must demonstrate that the proposed wind energy development has been designed to avoid unreasonable adverse shadow flicker effects. Shadow flicker caused by wind turbines is defined as alternating changes in light intensity caused by the moving blade casting shadows on the ground and stationary objects. Shadow flicker is the sun seen through a rotating wind turbine rotor. Shadow flicker does not occur when the sun is obscured by clouds or fog or when the turbine is not rotating. The spatial relationships between a wind turbine and receptor, as well as wind direction which causes the turbines to rotate, are key factors relating to shadow flicker occurrence and duration. At distances of greater than 1,000 feet between wind turbines and receptors, shadow flicker usually occurs when the rotor plane is in-line with the sun and receptor (as seen from the receptor), the cast shadows would be very narrow (blade thickness) and of low intensity, and the shadows would move quickly past the stationary receptor. When the rotor plane is perpendicular to the sun-receptor "view line," the cast shadow of the blades would move within a circle equal to the turbine rotor diameter.

The applicant submitted a shadow flicker analysis with its application. The applicant used WindPRO, a wind modeling software program, to model expected shadow flicker effects on adjacent properties from the 14 proposed turbine locations. The applicant assumed a worst case scenario, that all receptors have a direct in-line view of the incoming shadow flicker sunlight, and did not take into account any existing vegetative buffers.

The Department generally recommends that an applicant conduct a shadow flicker model out to a distance of 1,000 feet or greater from a residential structure, and the applicant's model did so. The applicant modeled two receptors, A and B, which are

located within 1 mile of the project and which would potentially receive shadow flicker. Maine currently has no numerical regulatory limits on exposure to shadow flicker; however, the industry commonly uses 30 hours per year as a limit to reduce nuisance complaints. Receptor A would have approximately 46.54 hours of flicker per year and receptor B would have approximately 4.37 hours per year. The applicant has a lease agreement with Receptor A allowing shadow flicker greater than 30 hours per year. Based on the WindPRO analysis, no other property is calculated to receive flicker in excess of 30 hours per year.

The Department finds the shadow flicker modeling conducted by the applicant is credible. Based upon the proposed project's location and design, the distance to the nearest shadow flicker receptor, and results of the shadow flicker analysis, the Department finds that the proposed project would not unreasonably cause shadow flicker to occur over adjacent properties which are not subject to an easement allowing for shadow flicker.

19. PUBLIC SAFETY:

The proposed project would use Vestas V112 3.0-megawatt (MW) wind turbine generators. The turbines' conformity with International Electrotechnical Commission standards has been certified by Det Norske Veritas and included in the applications in Appendix 27-2 dated March 19, 2010.

The Department recognizes that locating wind turbines a safe distance away from any occupied structures, public roads or other public use areas is extremely important. In establishing a recommended safety setback, the Department considered industry standards for wind energy production in climates similar to Maine, as well as the guidelines recommended by certifying agencies such as Det Norske Veritas. Based on these sources, the Department requires that all wind turbines be set back from the property line, occupied structures, or public areas, a minimum of 1.5 times the maximum blade height for the wind turbine. Based on the Department setback specifications, the minimum setback distance to the nearest property line should be 688.5 feet for the Vestas turbines. A review of the application indicates that all turbines are set back at least 688.5 from property lines, occupied structures and public areas.

The Department finds that the applicant provided documentation of industry standard compliance by the manufacturer that the wind generation equipment has been designed to conform to applicable industry safety standards, and has demonstrated that the proposed project has been sited such that it would not present an unreasonable safety hazard to adjacent properties or adjacent property uses. The Department further finds that the applicant has submitted sufficient evidence which demonstrates that the proposed project would be sited with appropriate safety setbacks from adjacent properties and existing uses.

20. DECOMMISSIONING PLAN:

In order to facilitate and ensure appropriate removal of the wind generation equipment when it reaches the end of its useful life or if the applicant ceases operation of the turbines, the Department requires an applicant to demonstrate, in the form of a decommissioning plan, the means by which decommissioning would be accomplished. The applicant submitted a decommissioning plan which includes a description of the trigger for implementing the decommissioning, a description of the work required, an estimate of decommissioning costs, a schedule for contributions to its decommissioning fund, and a demonstration of financial assurance.

- A. Trigger for implementation of decommissioning. The proposed wind turbine generators are designed and certified by independent agencies for a minimum expected operational life of 20 years, however other factors may trigger the requirement for decommissioning before 20 years have passed. The applicant's proposal is that the wind generation facility would be decommissioned when it ceases to generate electricity for a continuous period of twelve months. In the case of a force majeure event which causes the project to fail to generate electricity for 12 months, the applicant proposes that it be allowed to submit to the Department for review and approval reasonable evidence in support of a request that they not be required to decommission the project at that time.

An exception to the requirement that decommissioning begin if twelve months of no generation occurs would be allowed for a force majeure event, however the Department finds that the applicant's proposed definition of "force majeure" is exceedingly broad, and instead provides as follows: The Department considers a force majeure to mean fire, earthquake, flood, tornado, or other acts of God and natural disasters; strikes or labor disputes; and war, civil strife or other similar violence. In the event of a force majeure event which results in the absence of electrical generation for twelve months, by the end of the twelfth month of non-operation the applicant shall demonstrate to the Department that the project would be substantially operational and producing electricity within twenty-four months of the force majeure event. If such a demonstration is not made to the Department's satisfaction, the decommissioning must be initiated eighteen months after the force majeure event.

- B. Description of work. The description of work contained in the application outlines the applicant's proposal for the manner in which the turbines and other components of the proposed project would be dismantled and removed from the site. Subsurface components would be removed to a minimum of 24 inches below grade, generating facilities would be removed and salvaged and disturbed areas would be re-seeded. At the time of decommissioning, the applicant must submit a plan for continued beneficial use of any wind energy development components proposed to be left on-site to the Department for review and approval.
- C. Financial Assurance. The applicant estimates that the current cost for decommissioning the project would be \$504,600. The applicant proposes that financial assurance for the decommissioning costs would be in the form of (i) cash,

(ii) a letter of credit, or (iii) a combination of cash and a letter of credit for the total cost of decommissioning. The applicant proposes to have the financial assurance mechanism in place prior to construction and to re-evaluate the decommissioning cost at the end of years eight and 15.

Based on the applicants' proposal outlined above, and in consideration of the public comments, the Department finds that the applicant's proposal would adequately provide for decommissioning, provided the applicant implemented the decommissioning plan as proposed.

21. TANGIBLE BENEFITS:

In its application the applicant described tangible benefits that the project would provide to the State of Maine and to the host communities, including economic benefits and environmental benefits.

The applicant states that its proposal would benefit the host communities and surrounding areas through construction-related employment opportunities. These would include tree clearing and excavation jobs, and jobs in businesses that support construction such as lodging, restaurant, fuel and concrete supply. In addition, the applicant has signed an agreement with the Forest Society of Maine (FSM), in which the applicant has agreed to provide \$4,000.00 per turbine per year for 20 years. The agreement requires FSM to utilize these funds for land and natural resource conservation. Preference would be given to projects in the vicinity of Passadumkeag Mountain by FSM when utilizing the funds. Staff from the Governor's Office of Policy and Management reviewed the Tangible Benefit agreement between Passadumkeag Wind Park, LLC and FSM and concluded that the agreement met the requirements of the Wind Energy Act.

Based on the employment opportunities, the tax revenue and the Community Benefits Agreement proposed by the applicant, the Department finds that the applicant has demonstrated that the proposed project would provide significant tangible benefits to the host communities and surrounding area pursuant to 35-A M.R.S.A. §3454, provided that annual payments were made to FSM as described above.

BASED on the above findings of fact, the Department makes the following conclusions pursuant to 38 M.R.S.A. Sections 480-A et seq. and Section 401 of the Federal Water Pollution Control Act:

- A. The proposed activity would not interfere with existing recreational or navigational uses. In that the proposed activity would significantly compromise views from a SRSNS and would have an unreasonable adverse effect on the scenic character and existing uses related to scenic character of the resource, the proposed activity would unreasonably interfere with existing scenic and aesthetic uses.
- B. The proposed activity would not cause unreasonable erosion of soil or sediment.

- C. The proposed activity would not unreasonably inhibit the natural transfer of soil from the terrestrial to the marine or freshwater environment.
- D. The proposed activity would not unreasonably harm any significant wildlife habitat, freshwater wetland plant habitat, threatened or endangered plant habitat, aquatic habitat, travel corridor, freshwater, estuarine, or marine fisheries or other aquatic life provided the applicant was to implement turbine curtailment and provide a final mortality monitoring methodology to the Department as described in Finding 7, and all buffers were marked prior to construction as described in Finding 9.
- E. The proposed activity would not unreasonably interfere with the natural flow of any surface or subsurface waters.
- F. The proposed activity would not violate any state water quality law including those governing the classifications of the State's waters.
- G. The proposed activity would not unreasonably cause or increase the flooding of the alteration area or adjacent properties.
- H. The proposed activity would not be on or adjacent to a sand dune.
- I. The proposed activity would not be on an outstanding river segment as noted in 38 M.R.S.A. Section 480-P.

BASED on the above findings of fact, and subject to the conditions listed below, the Department makes the following conclusions pursuant to 38 M.R.S.A. Sections 481 et seq.:

- A. The applicant has provided adequate evidence of financial capacity and technical ability to develop the project in a manner consistent with state environmental standards provided that, prior to construction, the applicant submits evidence that financing has been secured as outlined in Finding 3.
- B. In that the proposed activity would significantly compromise views from a SRSNS and would have an unreasonable adverse effect on the scenic character and existing uses related to scenic character of the resource, the applicant has not made adequate provision for fitting the generating facility portion of the development harmoniously into the existing natural environment. The development would have an unreasonable adverse effect on the existing uses and scenic character of Saponac Pond, a SRSNS. The applicant has made adequate provision for fitting the associated facilities portion of the development harmoniously into the existing natural environment. The applicant has made adequate provisions for air quality, water quality and other natural resources in the municipality or in neighboring municipalities provided that the applicant was to implement turbine curtailment and provide a final mortality monitoring methodology to the Department as described in Finding 7, and all buffers were marked prior to construction as described in Finding 9.

- C. The proposed development would be built on soil types which are suitable to the nature of the undertaking and would not cause unreasonable erosion of soil or sediment nor inhibit the natural transfer of soil provided that the applicant submits a revised blasting plan as described in Finding 10, and provided that the SPCC Plan is submitted as described in Finding 12.
- D. The proposed development meets the standards for stormwater management in Section 420-D and the standard for erosion and sedimentation control in Section 420-C provided the applicant records the Declaration of Restrictions, submits the recorded deed restrictions, and permanently marks the locations of protected buffers prior to construction, as described in Finding 11.
- E. The proposed development would not pose an unreasonable risk that a discharge to a significant groundwater aquifer would occur provided that the applicant submits the SPCC Plan as described in Finding 12.
- F. The applicant has made adequate provision of utilities, including water supplies, sewerage facilities and solid waste disposal required for the development, and the development would not have an unreasonable adverse effect on the existing or proposed utilities in the municipality or area served by those services, provided sites used to obtain water used for dust control are as described in Finding 13.
- G. The activity would not unreasonably cause or increase the flooding of the alteration area or adjacent properties nor create an unreasonable flood hazard to any structure.
- H. The proposed development would not unreasonably cause shadow flicker effects to occur over adjacent properties.
- I. The activity would not present an unreasonable safety hazard to adjacent properties or adjacent property uses.
- J. The applicant has made adequate provisions to achieve decommissioning of the wind power facility provided the decommissioning plan is implemented as described in Finding 20.
- K. The activity would provide significant tangible benefits to the host community and surrounding area, provided that the applicant implements the Community Benefit Agreement as discussed in Finding 21.

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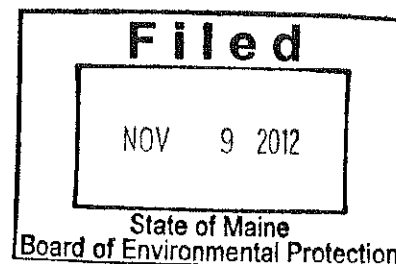
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THEREFORE, the Department DENIES the application of PASSADUMKEAG WIND PARK, LLC to construct a 14-turbine, grid-scale, wind energy development as described in Finding 1.

DONE AND DATED IN AUGUSTA, MAINE, THIS 8th DAY OF November, 2012.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Patricia W. Aho
Patricia W. Aho, Commissioner



PLEASE NOTE THE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES...

JB/L25597ANBN/ATS#74371&74372



DEP INFORMATION SHEET

Appealing a Department Licensing Decision

Dated: March 2012

Contact: (207) 287-2811

SUMMARY

There are two methods available to an aggrieved person seeking to appeal a licensing decision made by the Department of Environmental Protection's ("DEP") Commissioner: (1) in an administrative process before the Board of Environmental Protection ("Board"); or (2) in a judicial process before Maine's Superior Court. An aggrieved person seeking review of a licensing decision over which the Board had original jurisdiction may seek judicial review in Maine's Superior Court.

A judicial appeal of final action by the Commissioner or the Board regarding an application for an expedited wind energy development (35-A M.R.S.A. § 3451(4)) or a general permit for an offshore wind energy demonstration project (38 M.R.S.A. § 480-HH(1)) or a general permit for a tidal energy demonstration project (38 M.R.S.A. § 636-A) must be taken to the Supreme Judicial Court sitting as the Law Court.

This INFORMATION SHEET, in conjunction with a review of the statutory and regulatory provisions referred to herein, can help a person to understand his or her rights and obligations in filing an administrative or judicial appeal.

I. ADMINISTRATIVE APPEALS TO THE BOARD

LEGAL REFERENCES

The laws concerning the DEP's *Organization and Powers*, 38 M.R.S.A. §§ 341-D(4) & 346, the *Maine Administrative Procedure Act*, 5 M.R.S.A. § 11001, and the DEP's *Rules Concerning the Processing of Applications and Other Administrative Matters* ("Chapter 2"), 06-096 CMR 2 (April 1, 2003).

HOW LONG YOU HAVE TO SUBMIT AN APPEAL TO THE BOARD

The Board must receive a written appeal within 30 days of the date on which the Commissioner's decision was filed with the Board. Appeals filed after 30 calendar days of the date on which the Commissioner's decision was filed with the Board will be rejected.

HOW TO SUBMIT AN APPEAL TO THE BOARD

Signed original appeal documents must be sent to: Chair, Board of Environmental Protection, c/o Department of Environmental Protection, 17 State House Station, Augusta, ME 04333-0017; faxes are acceptable for purposes of meeting the deadline when followed by the Board's receipt of mailed original documents within five (5) working days. Receipt on a particular day must be by 5:00 PM at DEP's offices in Augusta; materials received after 5:00 PM are not considered received until the following day. The person appealing a licensing decision must also send the DEP's Commissioner a copy of the appeal documents and if the person appealing is not the applicant in the license proceeding at issue the applicant must also be sent a copy of the appeal documents. All of the information listed in the next section must be submitted at the time the appeal is filed. Only the extraordinary circumstances described at the end of that section will justify evidence not in the DEP's record at the time of decision being added to the record for consideration by the Board as part of an appeal.

WHAT YOUR APPEAL PAPERWORK MUST CONTAIN

Appeal materials must contain the following information at the time submitted:

1. *Aggrieved Status.* The appeal must explain how the person filing the appeal has standing to maintain an appeal. This requires an explanation of how the person filing the appeal may suffer a particularized injury as a result of the Commissioner's decision.
2. *The findings, conclusions or conditions objected to or believed to be in error.* Specific references and facts regarding the appellant's issues with the decision must be provided in the notice of appeal.
3. *The basis of the objections or challenge.* If possible, specific regulations, statutes or other facts should be referenced. This may include citing omissions of relevant requirements, and errors believed to have been made in interpretations, conclusions, and relevant requirements.
4. *The remedy sought.* This can range from reversal of the Commissioner's decision on the license or permit to changes in specific permit conditions.
5. *All the matters to be contested.* The Board will limit its consideration to those arguments specifically raised in the written notice of appeal.
6. *Request for hearing.* The Board will hear presentations on appeals at its regularly scheduled meetings, unless a public hearing on the appeal is requested and granted. A request for public hearing on an appeal must be filed as part of the notice of appeal.
7. *New or additional evidence to be offered.* The Board may allow new or additional evidence, referred to as supplemental evidence, to be considered by the Board in an appeal only when the evidence is relevant and material and that the person seeking to add information to the record can show due diligence in bringing the evidence to the DEP's attention at the earliest possible time in the licensing process or that the evidence itself is newly discovered and could not have been presented earlier in the process. Specific requirements for additional evidence are found in Chapter 2.

OTHER CONSIDERATIONS IN APPEALING A DECISION TO THE BOARD

1. *Be familiar with all relevant material in the DEP record.* A license application file is public information, subject to any applicable statutory exceptions, made easily accessible by DEP. Upon request, the DEP will make the material available during normal working hours, provide space to review the file, and provide opportunity for photocopying materials. There is a charge for copies or copying services.
2. *Be familiar with the regulations and laws under which the application was processed, and the procedural rules governing your appeal.* DEP staff will provide this information on request and answer questions regarding applicable requirements.
3. *The filing of an appeal does not operate as a stay to any decision.* If a license has been granted and it has been appealed the license normally remains in effect pending the processing of the appeal. A license holder may proceed with a project pending the outcome of an appeal but the license holder runs the risk of the decision being reversed or modified as a result of the appeal.

WHAT TO EXPECT ONCE YOU FILE A TIMELY APPEAL WITH THE BOARD

The Board will formally acknowledge receipt of an appeal, including the name of the DEP project manager assigned to the specific appeal. The notice of appeal, any materials accepted by the Board Chair as supplementary evidence, and any materials submitted in response to the appeal will be sent to Board members with a recommendation from DEP staff. Persons filing appeals and interested persons are notified in advance of the date set for Board consideration of an appeal or request for public hearing. With or without holding a public hearing, the Board may affirm, amend, or reverse a Commissioner decision or remand the matter to the Commissioner for further proceedings. The Board will notify the appellant, a license holder, and interested persons of its decision.

II. JUDICIAL APPEALS

Maine law generally allows aggrieved persons to appeal final Commissioner or Board licensing decisions to Maine's Superior Court, see 38 M.R.S.A. § 346(1); 06-096 CMR 2; 5 M.R.S.A. § 11001; & M.R. Civ. P. 80C. A party's appeal must be filed with the Superior Court within 30 days of receipt of notice of the Board's or the Commissioner's decision. For any other person, an appeal must be filed within 40 days of the date the decision was rendered. Failure to file a timely appeal will result in the Board's or the Commissioner's decision becoming final.

An appeal to court of a license decision regarding an expedited wind energy development, a general permit for an offshore wind energy demonstration project, or a general permit for a tidal energy demonstration project may only be taken directly to the Maine Supreme Judicial Court. See 38 M.R.S.A. § 346(4).

Maine's Administrative Procedure Act, DEP statutes governing a particular matter, and the Maine Rules of Civil Procedure must be consulted for the substantive and procedural details applicable to judicial appeals.

ADDITIONAL INFORMATION

If you have questions or need additional information on the appeal process, for administrative appeals contact the Board's Executive Analyst at (207) 287-2452 or for judicial appeals contact the court clerk's office in which your appeal will be filed.

Note: The DEP provides this INFORMATION SHEET for general guidance only; it is not intended for use as a legal reference. Maine law governs an appellant's rights.
